

**RESPONSES TO COMMENTS  
DRAFT EIR NO. 604  
STATE CLEARINGHOUSE NO. 2005071102**

**1.0 PUBLIC NOTICE**

The County of Orange, Integrated Waste Management Department (IWMD) submitted the Draft Environmental Impact Report (DEIR) for the proposed RELOOC Strategic Plan – Frank R. Bowerman Implementation Project to the State Clearinghouse (SCH) on January 23, 2006. A Notice of Completion (NOC) was posted at the SCH and a Notice of Availability (NOA) was posted at the Orange County Clerk Office on January 24, 2006. The NOC and NOA for the DEIR are provided in Attachment A. The NOA was advertised in the Orange County Register and in the Irvine World News; the record of publications are also provided in Attachment A. The NOA was sent to interested individuals, and federal, state and local agencies. The distribution list for the DEIR is provided in Attachment B. The public review period for the DEIR was 45 days (January 24, 2006 through March 9, 2006). The DEIR was made available for public review at the following locations:

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|---|--|
| • Integrated Waste Management Department<br>320 North Flower Street, Suite 400<br>Santa Ana, CA | • California State University, Fullerton<br>Library Document Section<br>Fullerton                |
| • Orange County Public Library<br>31495 El Camino Real<br>San Juan Capistrano                   | • Orange County Public Library<br>14361 Yale Avenue<br>Irvine                                    |
| • Orange County Public Library<br>33841 Niguel Road<br>Dan Point                                | • Orange County Public Library<br>242 Avenida Del Mar<br>San Clemente                            |
| • Orange County Public Library<br>One Civic Center Circle<br>Brea                               | • Orange County Public Library<br>30341 Crown Valley Parkway<br>Laguna Niguel                    |
| • Orange County Public Library<br>4512 Sandburg Way<br>Irvine                                   | • University of California, Irvine<br>Main Library, Government Publications Microfilms<br>Irvine |

In addition, copies of the DEIR were also available for purchase either as a hard copy or on CDs.

**2.0 SUMMARY OF WRITTEN COMMENTS RECEIVED DURING THE  
PUBLIC REVIEW PROCESS FOR THE DRAFT EIR**

Written comments on the DEIR received during the public review period are included in this Section. Responses to these comments are provided following each comment letter. When a comment is made by multiple parties, the response is provided the first time the comment is made and all later similar comments are referred back to that response.

The format of the responses to all the comments is based on a unique letter and number code for each comment. The letter and number immediately following the letter refer to an individual agency, business, group, organization or member of the general public comment letter. The number at the end of the code refers to a specific comment within the individual letter. Therefore, each comment has a unique code assignment. For example, comment F1-1 is the first comment in letter F1.

Section 15204(a) of the California Environmental Quality Act (CEQA) Guidelines indicates that “When responding to comments, lead agencies need only respond to significant environmental issues and do not need to provide all information requested by reviewers, as long as a good faith effort at full disclosure is made in the EIR.” Some of the comments received on the DEIR for the RELOOC Strategic Plan – Frank R. Bowerman Landfill Implementation Project raised issues which are not environmental issues or provided comments or opinions on the project unrelated to specific environmental issues. The responses to comments on the DEIR specifically focus on those comments that relate to potentially significant environmental issues, consistent with the requirements of Section 15204(a) of the CEQA Guidelines.

Written comments on the DEIR for the proposed RELOOC Strategic Plan – Frank R. Bowerman Landfill Implementation Project were received from the following:

2.1 WRITTEN COMMENTS RECEIVED FROM FEDERAL AGENCIES

F1 United States Fish and Wildlife Service/California Department of Fish and Game (March 24, 2006).

2.2 WRITTEN COMMENTS RECEIVED FROM STATE AGENCIES

S1 State of California Department of Transportation - District 12 (March 6, 2006).

S2 California Integrated Waste Management Board (March 9, 2006).

S3 State of California Governor’s Office of Planning and Research (March 10, 2006).

Note: California Department of Fish and Game comments are addressed in the joint Letter F1.

2.3 WRITTEN COMMENTS RECEIVED FROM REGIONAL AND LOCAL AGENCIES

R1 County of Orange Resources & Development Management Department (February 28, 2006).

R2 City of Irvine (March 7, 2006).

R3 South Coast Air Quality Management District (March 9, 2006).

R4 County of Orange Health Care Agency (March 9, 2006).



2.4 WRITTEN COMMENTS RECEIVED FROM BUSINESSES, GROUPS AND ORGANIZATIONS

B1 North Irvine Villages Association (March 3, 2006).

B2 Orange County Great Park (March 7, 2006).

B3 Irvine Unified School District Construction and Facilities (April 10, 2006).

2.5 LATE COMMENT LETTERS

It should be noted that there were two comment letters submitted after March 9, 2006 end of the 45 day review period. The first late comment letter was a joint letter from the United States Fish and Wildlife Service and California Department of Fish and Game. The second late comment letter was from the Irvine Unified School District Construction and Facilities. Because the comment letters submitted by the United States Fish and Wildlife Service and California Department of Fish and the Irvine Unified School District Construction and Facilities raised new issues regarding the proposed project, they were included in Section 2.1 and 2.4 (above) and were provided with responses.

**FEDERAL AGENCIES**

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U.S. Fish and Wildlife Service  
Carlsbad Fish and Wildlife Office  
6010 Hidden Valley Road  
Carlsbad, California 92011  
(760) 431-9440  
FAX (760) 918-0638



CA Department of Fish & Game  
South Coast Region  
4949 Viewridge Avenue  
San Diego, California 92123  
(858) 467-4201  
FAX (858) 467-4299

In Reply Refer To:  
FWS/CDFG-OR-2259.12

Ms. Cymantha Atkinson  
County of Orange, Integrated Waste Management Department  
320 North Flower Street, Suite 400  
Santa Ana, California 92703

MAR 24 2006

F1

Subj: Draft Environmental Impact Report for Regional Landfill Options for Orange County (RELOOC) Strategic Plan - Frank R. Bowerman (FRB) Landfill Implementation Project (SCH# 2005071102), and Negative Declaration for a Major Amendment to the Central/Coastal Orange County Natural Community Conservation Plan/Habitat Conservation Plan (SCH# 2006021129) in Orange County, California

Dear Ms. Atkinson:

The U.S. Fish and Wildlife Service (Service) and the California Department of Fish and Game (Department), hereafter collectively referred to as the Wildlife Agencies, have reviewed the Draft Environmental Impact Report (DEIR) for Regional Landfill Options for Orange County (RELOOC) Strategic Plan - Frank R. Bowerman (FRB) Landfill Implementation Project, Orange County, received January 23, 2006. We have also reviewed the Negative Declaration (ND), received on February 24, 2006, for a proposed Major Amendment to the Central/Coastal Orange County Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) to address the additional impacts to NCCP/HCP Reserve lands and target species associated with the landfill expansion.

F1-1

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has a legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). The Department is a Trustee Agency and a Responsible Agency pursuant of the California Environmental Quality Act (CEQA), Sections 15386 and 15381, respectively. The Department is responsible for the conservation, protection, and management of the state's biological resources, including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act and other sections of the Fish and Game Code. The Department also administers the Natural Community Conservation Planning program.

F1-2

The FRB Landfill site is located on approximately 725 acres of unincorporated Orange County, at 11002 Bee Canyon Access Road, near the City of Irvine. Access to the landfill is from the

F1-3

Santa Ana Freeway, (Interstate 5); San Diego Freeway (Interstate 405) and the Eastern Transportation Corridor (State Route 133). The FRB Landfill is situated in the headwaters of the Bee Canyon drainage. Cut and fill grading has been performed to allow for placement of liner on the bottom of the canyon, and adjacent side slopes. The FRB Landfill opened in 1990 and its currently permitted closure date is 2022. The landfill is owned and managed by the Integrated Waste Management Department (IWMD) of the County of Orange.

F1-3

The proposed project includes: (1) a substantial increase in the size of the landfill, including both vertical and horizontal expansion; (2) an increase in the duration of landfill operations (i.e., the closure date would be changed from 2022 to 2053); (3) temporary disturbance outside the property boundary for slope stabilization and remediation, to remediate the effects of the 2002 landslide; (4) an increase in the daily maximum tonnage to be landfilled; (5) a Soil Management Plan that preserves adjacent canyons by stockpiling operational dirt on the landfill site; and (6) provisions to ensure that plant and animal habitats on the landfill property continue to be planned for and protected.

F1-4

According to the DEIR and ND, the proposed project would impact a total of about 212.26 acres including an estimated 138.34 acres of mixed sage scrub communities, 1.58 acres of southern sycamore riparian, 1.17 acres of coast live oak woodland, 3.98 acres of southern willow scrub, 19.96 acres of toyon-sumac chaparral, 12.02 acres of ruderal grassland, and 35.21 acres of revegetation areas. Sensitive species observed on the site include State species of concern and federally threatened coastal California gnatcatcher (*Poliopitila californica californica*); State species of concern orange-throated whiptail (*Aspidoscelis hyperythrus*), San Diego horned lizard (*Phrynosoma coronatum blainvilleti*), coastal cactus wren (*Campylorhynchus brunneicapillus*), Cooper's hawk (*Accipiter cooperii*), northern harrier (*Circus cyaneus*), loggerhead shrike (*Lanius ludovicianus*), rufous-crowned sparrow (*Aimophila ruficeps canescens*), and San Diego desert woodrat (*Neotoma lepida intermedia*); California Native Plant Society (CNPS) List 1B intermediate (foothill) mariposa lily (*Calochortus weedii* var. *intermedius*) and many-stemmed dudleya (*Dudleya multicaulis*); and CNPS List 4 Catalina mariposa lily (*Calochortus catalinae*).

F1-5

The FRB Landfill is located within the area addressed under the NCCP/HCP. The NCCP/HCP designates the FRB Landfill as an "Existing Use" that is permitted to continue functioning, provided that the project is not substantially modified from what was anticipated in the NCCP/HCP and all identified minimization and avoidance measures are implemented. Part of the FRB Landfill property, a 173-acre area located in the north-central part of the property, is designated as a "Special Linkage" by the NCCP/HCP. On termination of landfill activities and closure of the landfill, the remaining 550 acres of the landfill property surrounding the existing Special Linkage area are to become part of the Reserve System, restored with coastal sage scrub, and managed in accordance with the provisions of the NCCP/HCP Implementation Agreement and applicable landfill closure agreements. As described in the DEIR and ND, an amendment to the NCCP/HCP is necessary because the increase in the size and duration of landfill operations will substantially increase impacts to Reserve lands and target species beyond what was anticipated in the NCCP/HCP.

F1-6

**Comments:**

- |   |       |
|---|-------|
| 1. The Department recommends that measures to avoid, minimize, and mitigate impacts to riparian and wetland resources are given special consideration in the Final EIR (FEIR). The Department will work with the County to ensure that the proposed mitigation meets the requirements of Fish and Game Code 1600 while also meeting conservation goals for the area.  | F1-7  |
| 2. The Department also recommends a minimum mitigation ratio of 3:1 for impacts to coast live oak woodland and 1:1 for impacts to chaparral. Coast live oak woodland is a sensitive and declining habitat type, is difficult to restore, and takes many years before habitat functions and values in restoration areas are equivalent to impacted areas. Although not considered a sensitive habitat type, chaparral is a native habitat type that supports a wide variety of sensitive species and is declining throughout the state as a result of ongoing development.   | F1-8  |
| 3. The commitment to restore the portion of the FRB landfill cap in the Reserve with coastal sage scrub upon landfill closure should be included as a mitigation measure in the "Biological Resources" section of the FEIR and ND.  | F1-9  |
| 4. The Wildlife Agencies support the identified coastal sage scrub restoration sites, including conservation and restoration of the Oso Nursery Site because of its importance for regional connectivity.   | F1-10 |
| 5. Specific sites for coast live oak woodland, chaparral, and riparian habitat restoration and many-stemmed dudleya translocation should be identified in the FEIR. Restoration should be conducted consistent with plans that include, at a minimum: the location of the mitigation site(s); a schematic layout depicting the mitigation area; time of year that planting will occur; a description of the irrigation methodology to be employed; measures to control exotic vegetation on site; a detailed monitoring program which includes provisions for replanting areas where planted materials have not survived; success criteria; and contingency measures should the success criteria not be met. We recommend that all restoration plans associated with this project be submitted to the Service and the Department for review and approval. | F1-11 |
| 6. If restoration sites are not identified in the FEIR, we recommend that IWMD work with the Wildlife Agencies to identify and prepare these sites well before they are needed. For example, the selection and preparation of the many-stemmed dudleya relocation site should be completed several years prior to impacts to many-stemmed dudleya associated with Phase IX of the landfill expansion.   | F1-12 |
| 7. Under the existing NCCP/HCP, the 173-acre Special Linkage Area was anticipated to be developed as a golf course on completion of landfill activities. With the redesign of the landfill, the golf course will no longer be feasible. The FEIR and ND should clarify what   | F1-13 |

7. Under the existing NCCP/HCP, the 173-acre Special Linkage Area was anticipated to be developed as a golf course on completion of landfill activities. With the redesign of the landfill, the golf course will no longer be feasible. The FEIR and ND should clarify what kinds of uses will be permissible within the Special Linkage Area. The uses should be consistent with the goals of the Special Linkage Area in terms of its functions for wildlife.

F1-14

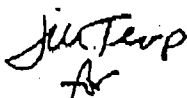
8. We recommend that the County work closely with the Wildlife Agencies and the Board of Directors for the Nature Reserve of Orange County in finalizing the NCCP/HCP Major Amendment to ensure that the proposed amendment is consistent with the goals and requirements of the NCCP/HCP.

F1-15

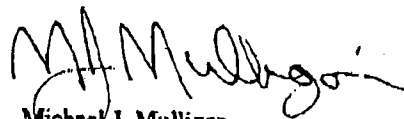
We appreciate the opportunity to comment on the DEIR and ND and we look forward to working with you to finalize the proposed major amendment to the NCCP/HCP. If you have any questions regarding this letter, please contact Jonathan Snyder of the Service at (760) 431-9440 x307 or Leslie Newton-Reed of the Department at (858) 467-4281.

F1-16

Sincerely,



Karen A. Goebel  
Assistant Field Supervisor  
U.S. Fish and Wildlife Service



Michael J. Mulligan  
Deputy Regional Manager  
California Department of Fish and Game

cc:

State Clearinghouse, Sacramento, CA

Cori Farrar, USACOE, Los Angeles, CA

Lyndine McAfee, NROC, Irvine, CA

John Arnau, IWMD/Management Services Section, Santa Ana, CA

**F1     RESPONSES TO COMMENTS FROM THE UNITED STATES FISH AND WILDLIFE SERVICE/CALIFORNIA DEPARTMENT OF FISH AND GAME DATED RECEIVED MARCH 24, 2006**

F1-1    Comment noted. No response necessary.

F1-2    Comment noted. No response necessary.

F1-3    Comment noted. No response necessary.

F1-4    Comment noted. No response necessary.

F1-5    Comment noted and acknowledged. It should be noted that, the comment uses the phrase “Sensitive species observed on the site include ...” note that these sightings do not necessarily occur within the phased project limits of disturbance, but on the property and immediately adjacent areas.

F1-6    Comment noted. An amendment to the NCCP/HCP will be required.

F1-7    Comment acknowledged. IWMD will continue to work with both USFWS and CDFG to ensure that IWMD provides mitigation for the lost functions and values of the wetland/riparian community, consistent with resource agency requirements and conditions presented in Section 404 Corps Permit and 1602 CDFG Streambed Alteration Agreement and meet the regulatory standards for the applicable state and/or federal regulatory program.

F1-8    The NCCP/HCP states that “Covered Habitats” are habitat types protected by the NCCP/HCP in a manner comparable to the protection of CSS. The NCCP/HCP furthers states that “Covered Habitats” include oak woodlands among other plant communities. Chaparral is a covered habitat in the coastal subarea only, not in the Central where the FRB Landfill is located. In addition, the impact to chaparral does not trigger or exceed the thresholds defined on page 5.8-20 of the DEIR as provided below.

“The project has a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations or by the CDFG or the USFWS.” Thresholds of significance are defined to provide a measure of significance and whether mitigation is warranted if exceeded.

The Department does not have chaparral listed as a sensitive habitat type as referenced in the comment and no mitigation has been contemplated, based upon thresholds established and consequently discussion of ratios is not necessary.

The 1.17 acre of coast live oak woodland is a “Covered Habitat” and is located within the proposed Phase X area outside areas authorized by the NCCP to be impacted. Mitigation to this “Covered Habitat” is more thoroughly addressed in the NCCP Major Amendment.

Mitigation Measure B-5 provides some flexibility to incorporate certain measures relevant to this project identified in the Major Amendment and Mitigated Negative Declaration documents. As discussed in the Major Amendment, and a part of the pre-mitigation strategy, establishment of the “Covered Habitat” will occur in advance of the impact, thereby addressing temporal loss and the need to have higher ratios. The 1.17 acres of coast live oak woodland restoration (1:1 ratio) will be located within either Santiago Canyon Landfill or FRB Landfill. The Major Amendment concludes for coast live oak woodland, “Therefore, replacement “Covered Habitat” acreage is in compliance with the provisions of the Major Amendment Criteria which states that no reduction in acreage of covered habitats shall occur.”

F1-9 Restoration of the FRB Landfill cap in the Reserve is not a mitigation measure resulting from the FRB Master Development Plan and has not been specifically included as such. The restoration of the landfill consistent with NCCP/HCP requirements are part of the project elements, not as a result of new significant adverse impacts resulting from the implementation and operation of the MDP project features.

F1-10 Comment noted. No response necessary.

F1-11 It is acknowledged that any restoration plans developed to provide consistency with the NCCP/HCP Major Amendment or compliance with the State Fish and Game Code Section 1600 will be coordinated with the Resource Agencies as suggested. Mitigation Measures B-1, B-2, B-5, B-7, B-8 and B-11 all address coordination with the Service and the Department. Restoration plans will include the components itemized in the comment as referenced in Measure B-5. Note that Measure B-1 does identify the sites for restoration for coastal sage scrub establishment. The riparian restoration site is addressed through Measure B-2 and clarified more thoroughly with Response to Comment F1-7.

F1-12 Comment noted and acknowledged. Any additional restoration sites not identified in the FEIR will be coordinated with the appropriate resource agency(s) before they are needed as specified in the applicable permit or agreement. This commitment also applies to the many-stemmed dudleya relocation site.

F1-13 On page 4-34 of the DEIR, last sentence towards top of the page, “The currently proposed end use after landfill closure is a passive regional park.” Should a more active end use be considered, IWMD will work to ensure that the use is consistent with the goals of the Special Linkage Area in terms of its functions for wildlife. In addition, during the additional operating life of the landfill, impacts on the Special Linkage Area will remain substantially as they are today.

F1-14 Comment noted. Refer to response F1-13, above.

F1-15 Comment noted. No response necessary.

F1-16 Comment noted. No response necessary.



**STATE AGENCIES**

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## DEPARTMENT OF TRANSPORTATION

District 12  
3337 Michelson Drive, Suite 380  
Irvine, CA 92612-8894



Flex your power!  
Be energy efficient!

S1

March 6, 2006

Ms. Cymantha Atkinson  
County of Orange IWMD  
320 North Flower Street, Suite 400  
Santa Ana, CA 92703

File: IGR/CEQA  
SCH#: 2005071102  
Log #: 1592A  
SR: 241, 133

**Subject: Regional Landfill Options for Orange County Strategic Plan – Frank R. Bowerman (FRB) Landfill Implementation Draft Environmental Impact Report**

Dear Ms. Atkinson,

Thank you for the opportunity to review and comment on the **Regional Landfill Options for Orange County Strategic Plan - Frank R. Bowerman Landfill Implementation Draft Environmental Impact Report**. This project is located in unincorporated Orange County north and within the sphere of influence of the City of Irvine. The proposed project includes: (1). Phased vertical and horizontal expansions of the FRB Landfill within the existing property boundary; (2). Temporary disturbance outside the property boundary for slope stabilization and remediation, to remediate the effects of the 2002 landslide; (3). An annual average of 8,500 tons per day (TPD) with an increase in the daily maximum to 11,500 TPD; (4). A Soil Management Plan that preserves adjacent canyons by stockpiling operational dirt on the landfill site; and (5). Provisions to ensure that plant and animal habitats on the landfill property continue to be planned for and protected.

S1-1

**Caltrans District 12 is a reviewing agency on this project, and has no comment.**

S1-2

Please continue to keep us informed of this project and any future developments, which could potentially impact the transportation facilities. If you have any questions or need to contact us, please do not hesitate to call Lan Zhou at (949) 756-7827.

S1-3

Sincerely,

ROBERT F. JOSEPH  
Chief of IGR/Community Planning Branch  
District 12

c: Terry Roberts, Office of Planning and Research  
Terri Pencovic, Caltrans HQ IGR/Community Planning  
Raouf Moussa, Traffic Operations  
Praveen Gupta, Environmental Planning

**S1    RESPONSES TO COMMENTS FROM THE STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION - DISTRICT 12 DATED MARCH 6,  
2006**

S1-1    Comment noted. No response necessary.

S1-2    Comment noted. No response necessary.

S1-3    Comment noted. No response necessary.



Alan C. Lloyd, Ph.D.  
Secretary for  
Environmental  
Protection

# California Integrated Waste Management Board

**Margo Reid Brown, Chair**

1001 I Street • Sacramento, California 95814 • (916) 341-6000  
Mailing Address: P. O. Box 4025, Sacramento, CA 95812-4025  
[www.ciwmb.ca.gov](http://www.ciwmb.ca.gov)



Arnold Schwarzenegger  
Governor

**S2**

March 9, 2006

Ms Cymantha Atkinson  
County of Orange - Integrated Waste Management Department  
320 North Flower Street, Suite 400  
Santa Ana, CA 92703

**Subject: SCH No. 2005071102:** Draft Environmental Impact Report for Regional Landfill Option for Orange County (RELOOC) Strategic Plan – Frank R. Bowerman Landfill Implementation (Solid Waste Facilities Permit No. 30-AB-0360) Orange County

Dear Ms Atkinson:

Thank you for allowing the California Integrated Waste Management Board's (Board) staff to provide comments for this proposed project and for your agency's consideration of these comments as part of the California Environmental Quality Act (CEQA) process.

S2-1

Board staff has reviewed the environmental document cited above and offers the following project description, analysis and our recommendations for the proposed project based on our understanding of the project. If the Board's project description varies substantially from the project as understood by the Lead Agency, Board staff requests incorporation of any significant differences in the Final Environmental Impact Report.

S2-2

## PROPOSED PROJECT DESCRIPTION

The Regional Landfill Option for Orange County is a long range strategic planning program initiated by the County of Orange Integrated Waste Management Department. The purpose of Regional Landfill Option for Orange County is to assess the County's existing disposal system capabilities and develop viable short and long term solid waste disposal options for the County. As part of the endeavor, the County is considering a number of short-term improvements to existing municipal solid waste landfills operated by the Integrated Waste Management Department.

S2-3

The proposed project site is located in unincorporated Orange County near the City of Irvine; the property address is 11002 Bee Canyon Access Road.

S2-4

California Environmental Protection Agency

Printed on Recycled Paper

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Web site at <http://www.ciwmb.ca.gov/>

The landfill is currently open Monday through Saturday from 7:00 AM to 4:00 PM for all commercial customers and from 4:00 PM to 5:00 PM for transfer trucks. Only MSW from commercial haulers and self-haul vehicles operating under commercial status is accepted at this landfill. Hazardous material is not accepted at this landfill. The peak elevation is 1100 feet above mean sea level. The peak permitted tonnage is 8,500 tons per day and 10,625 tons per day for up to 36 days per calendar year.

S2-5

The proposed project may require that additional buildings and structures be constructed at the landfill and will require the relocation of the existing entrance facilities, scales/scale house, landfill gas control facilities and other landfill support facilities in later phases of development.

**Frank R. Bowerman Landfill  
Current Entitlements  
and  
Proposed Entitlements**

	<b>Current Entitlements</b>	<b>Proposed Project Entitlements</b>
Permitted Area	725 Acres	725 Acres
Permitted Disposal Area	341 Acres	534 Acres
Remaining Capacity	44.6 MM tons as of 6/30/05	130 MM cu yds <sup>6</sup>
Maximum Elevation	1,100 ft above MSL	1,350 ft above MSL <sup>4</sup>
Maximum Depth Below Ground Surface	NA	NA
Estimated Closure Date	2022	2053
Peak Daily Tonnage	8,500 <sup>1</sup> tons per day	11,500 <sup>3</sup> tons per day
Peak Daily Vehicle	2220 <sup>2</sup>	2220 <sup>2</sup>
Facility Operating Hours	7 days per week/24 hours per day	7 days per week/24 hours per day
Days and Hours for Receipt of Waste – Commercial Haulers	7:00 AM to 4:00 PM Monday through Saturday	7:00 AM to 4:00 PM <sup>5</sup> Monday through Saturday
Days and Hours for Receipt of Waste - Transfer Trucks	4:00 PM to 5:00 PM Monday through Saturday	4:00 PM to 5:00 PM <sup>5</sup> Monday through Saturday
Approved Alternative Daily Cover	Geosynthetic Blankets (tarps) Processed Green Material	Geosynthetic Blankets (tarps) Processed Green Material
Types if Material Accepted	Non-hazardous MSW	Non-hazardous MSW

S2-6

1. Except for 36 days per year that 10,625 tons per day is allowed
2. 1110 round trips/vehicles entering the landfill on a daily basis – **NOT** enforced by the Local Enforcement Agency
3. Annual daily average of 8,500 tons per day, an alternative would increase annual daily average tonnage to 11,500 with the closure of Olinda Alpha
4. Not including approximately 4 feet of final cover
5. IWMMD is considering changing the hours for receipt of waste to 6:00 AM to 4:00 PM with - transfer trucks received from 6:00 AM to 7:00 AM
6. Over current permitted capacity

There are 9 areas of significant impact to health, safety and the environment, through mitigation measures, 6 will be reduced to a level of less than significant. | S2-7

Mitigated to a level of less than significant

- Geology and Soils
- Hydrology and Water Quality
- Surface Water Hydrology
- Transportation
- Cultural and Scientific Resources
- Hazards and Risk of Upset

| S2-8

Not mitigated to a level of less than significant – Requiring a Statement of Overriding Considerations

- Air Quality (Fugitive Dust, NO<sub>x</sub> and VOC) and Cumulative Impacts
- Biological Resources (Wetlands)
- Aesthetics (Visual)

| S2-9

## BOARD STAFF'S COMMENTS

As a Responsible Agency for Solid Waste Facilities Permit concurrence, Board staff will conduct an environmental analysis for this project, using the Draft Environmental Impact Report developed by the Lead Agency, in accordance with Title 14, California Code of Regulations (14 CCR), Section 15096. To assist in our review of the Draft Environmental Impact Report for Solid Waste Facilities Permit concurrence purposes, Board staff request that the following comments and questions be considered and addressed in the Final Environmental Impact Report.

| S2-10

For clarity and convenience, questions and comments that Board staff is seeking a specific response to will be *italicized* so the reader can more easily locate and respond to them. Board staff will also make statements that in their opinion are fact, if those statements are incorrect or unclear please notify Board staff. *By the environmental document not specifically prohibiting an action or activity that does not give tacit approval to perform that action or activity.*

| S2-11

## Landfill Buildings

*Any buildings to be constructed or sited above buried waste or within 1000 feet of buried waste must comply with Title 27 California Code of Regulations (27CCR) Section 21190. If there are any questions regarding Section 21190 contact Mike Wochnick, Supervisor – Remediation, Closure and Technical Services Branch, at 916.341.6318.*

| S2-12

## Hours of Operation

Currently the Solid Waste Facilities Permit allows receipt of waste from commercial haulers from 7:00 AM until 4:00 PM Monday through Saturday and transfer trucks from 4:00 PM until

| S2-13

5:00 PM. *The environmental document indicates that the operator is considering changing the hours of operation to 6:00 AM to 4:00 PM. Under what circumstance would this change occur? Will the change be permanent or will it fluctuate due to seasonal changes or some other circumstance?* S2-13

### Peak Elevation

*The proposed peak elevation of the landfill will not exceed 1354 feet above mean sea level including waste and final cover. If the landfill will exceed this elevation please discuss in the final environmental document.* S2-14

### Tonnages

The proposed peak or maximum daily tonnage for disposal is 11,500 tons per day, limited to an annual daily average for disposal of 8,500 tons per day. *Is this annual daily average based on a six day week or a seven day week? Does this annual daily average include tonnages for emergencies where the landfill might accept in excess of the maximum daily tonnage for say forest fires, slides, earthquakes or other natural or manmade disasters?* S2-15

Under the Settlement Agreement with the City of Irvine, Board staff estimates that Frank R. Bowerman Landfill can accept an annual daily average of 8200 tons per day. *Is this agreement going to be renegotiated to a higher level of say 8500 tons per day annual average or is the operator going to standby the 1.75 percent annual increase? If the operator is going to stand by the annual 1.75 percent increase Board staff estimates that it will not reach an annual daily tonnage of 8500 tons per day until 2009.* S2-16

*All material that passes over the scale and/or enters the landfill must be analyzed for in the environmental document. The Board as a Responsible Agency is concerned with the landfill's ability to handle and process all materials that are delivered to the landfill for disposal, beneficial use, recycling for other uses or processes.* S2-17

*Please indicate in the Final Environmental Impact Report the peak or maximum daily tonnages of the other materials that might be accepted as daily cover, alternative daily cover, recycling, for beneficial uses, etcetera. Remember the peak number of vehicles entering the landfill also must include those vehicles that bring these other materials as well as those for landfill workers, construction workers and visitors.* S2-18

The Solid Waste Facilities Permit should be written in such a manner that the peak municipal solid waste tonnage is listed as well as separate listings or categories for other materials.

As an example:

Permitted Tons per Operating Day	12,000	total tons per day
Non-Hazardous – General	8,000	tons per day
Other (asphalt, processed green waste and tires)	4,000	tons per day

S2-19

### Alternative Daily Cover

Only geosynthetic blankets and processed green waste are approved for use as alternative daily cover at this site. *Use of any other types of alternative daily covers approved by the Board must be discussed in the environmental document including site specific impacts and appropriateness of the proposed alternative daily cover to the specific environment.*

S2-20

### Types of Material Received and Material Processing

Board staff's understanding it that Frank R. Bowerman Landfill will only receive the same waste stream as currently receiving; non-hazardous commercial and residential waste, non hazardous industrial waste and construction and demolition wastes destined for direct disposal.

S2-21

*The environment document states that the landfill does not handle compostable material. In the same paragraph it is stated that the landfill receives tree and lawn clippings, leaves and brush, food wastes, all compostable. Please resolve this discrepancy in the Final Environmental Impact Report.*

S2-22

### Mitigation Measures

The Mitigation Reporting or Monitoring Program should also indicate that agencies designated to enforce mitigation measures in the Environmental Impact Report have reviewed the Mitigation Reporting or Monitoring Program and agreed that they have the authority and means to accomplish the designated enforcement responsibilities.

S2-23

### Statement of Overriding Considerations

Significant impacts after mitigation to the environment have been identified in the area of Air Quality, Biological Resources and Aesthetics. *Please forward the Statement of Overriding Considerations for Air Quality to the Board prior to its adoption by the approving agency.*

S2-24

### BOARD CEQA REVIEW

As a Responsible Agency under CEQA, Board staff's comments on environmental documents are intended to assist the Lead Agency in developing an environmental document that will be as complete and adequate as possible for use by the Lead Agency and all Responsible Agencies.

S2-25

Board staff's comments are intended to help decision-makers 1) identify potential impacts from proposed projects; 2) determine whether any such impacts are significant; and 3) ascertain whether significant impacts can be mitigated to a level of insignificance in compliance with the CEQA statutes and guidelines.

S2-26

When performing the initial review of a CEQA document such as a Draft Environmental Impact Report or Negative Declaration during the circulation process, the first analysis the Board staff must make, is to evaluate whether or not the proposed CEQA document clearly describes all

S2-27



phases of the project and assesses all potential primary and secondary impacts to the environment and/or public health and safety that could occur if the proposed project is implemented. | S2-27

When evaluating the adequacy of an environmental document for purposes of SWFP concurrence, Board staff must compare the design and operation of the facility as described in the proposed SWFP with the project as described and evaluated in the environmental document cited for CEQA compliance in the proposed SWFP. | S2-28

In order for Board staff to evaluate and recommend whether or not the environmental document is adequate for use in the Board's permitting process, the proposed project must be described in sufficient detail for Board staff to understand and evaluate the proposed project, potential environmental impacts, proposed mitigation measures, and findings as presented by the Lead Agency. | S2-29

When the proposed SWFP is received by the Board along with the citation of evidence of CEQA compliance by the Local Enforcement Agency (LEA), the second analysis performed by Board staff is to evaluate whether or not the CEQA evaluation in the cited environmental document supports the requested specifications, revisions, and/or conditions of the proposed SWFP. For instance, does the environmental document clearly describe and assess the potential air quality, water quality, geological impacts, traffic, noise, dust, vector and other health and safety impacts that can be associated with the proposed solid waste facility or changes in design and/or operation? When this type of information is included and addressed in the environmental document, the SWFP concurrence process is greatly facilitated. | S2-30

After comparison of the cited CEQA document with the proposed SWFP, Board staff makes a recommendation to the Board regarding the adequacy of the CEQA document for the Board's SWFP concurrence purposes. The Board members make the final determination of the adequacy of the CEQA document for SWFP concurrence as well as whether or not to concur in issuance of the SWFP. | S2-31

## SUMMARY

The Board staff thanks the Lead Agency for the opportunity to review and comment on the Draft Environmental Impact Report and hopes that this comment letter will be useful to the Lead Agency in carrying out their responsibilities in the CEQA process. | S2-32

The Board staff requests copies of any subsequent environmental documents including, the Final Environmental Impact Report, the Report of Facility Information/Joint Technical Document, any Statements of Overriding Consideration, copies of public notices, and any Notices of Determination for this project. | S2-33

**Please refer to 14 CCR, § 15094(d) that states: “If the project requires discretionary approval from any state agency, the local lead agency shall also, within five working days of this approval, file a copy of the notice of determination with OPR [State Clearinghouse].”** | S2-34

The Board staff requests that the Lead Agency provide a copy of its responses to the Board's comments at least ten days before certifying the Final Environmental Impact Report. Refer to PRC § 21092.5(a).

S2-35

If the document is certified during a public hearing, Board staff request ten days advance notice of this hearing. If the document is certified without a public hearing, Board staff requests ten days advance notification of the date of the certification and project approval by the decision-making body.

S2-36

If you have any questions regarding these comments, please contact me at 916.341.6728 or email at [rseamans@ciwmb.ca.gov](mailto:rseamans@ciwmb.ca.gov).

S2-37

Sincerely,

Raymond M. Seamans  
Permitting and Inspection Branch, Region 4  
Environmental Review  
Permitting and Enforcement Division  
**California Integrated Waste Management Board**

cc: Tadese Gebre-Hawariat  
Permitting and Inspection Branch, Region 4  
Permitting and Enforcement Division  
**California Integrated Waste Management Board**

Suzanne Hambleton, Supervisor  
Permitting and Inspection Branch, Region 4  
Permitting and Enforcement Division  
**California Integrated Waste Management Board**

Patricia Henshaw  
County of Orange Health Care Agency  
Environmental Health Division  
1241 East Dyer Road, Suite 120  
Santa Ana, CA 92705-5611

**S2      RESPONSES TO COMMENTS FROM THE CALIFORNIA INTEGRATED  
WASTE MANAGEMENT BOARD DATED MARCH 9, 2006**

S2-1    Comment noted. No response necessary.

S2-2    Comment noted. No response necessary.

S2-3    Comment noted. No response necessary.

S2-4    Comment noted. No response necessary.

S2-5    Comment noted. No response necessary.

S2-6    Comment noted. No response necessary.

S2-7    Comment noted. No response necessary.

S2-8    Comment noted. No response necessary.

S2-9    Comment noted. No response necessary.

S2-10   Comment noted. No response necessary.

S2-11   Comment noted. No response necessary.

S2-12   Existing and future buildings on the landfill property comply or will comply with 27 CCR, Section 21190.

S2-13   The operator, IWMD, is not proposing a change to the operating hours at this time. Should circumstances in the future require a change in the operating hours, necessary approvals will be pursued. The Joint Technical Document Amendment to be submitted for the project will propose to maintain the existing operating hours.

S2-14   Comment noted. The height of the FRB Landfill would be increased from its current permitted level of 1,100 feet AMSL to about 1,350 feet AMSL or a net vertical increase of approximately 250 feet.

S2-15   The annual daily average of 8,500 tpd is based on a six-day week. The annual daily average does account for periodic high tonnage days which exceed 8,500 tpd. However, accommodation of significant tonnage increase due to natural or manmade disasters are not included in the peak or annual daily average rate.

S2-16   IWMD plans to negotiate a mutually acceptable agreement with Irvine that will guide the relationship between the City and the department. The existing Settlement Agreement was entered into by the City and the County to resolve former litigation, and it is not

necessarily the appropriate legal mechanism to memorialize future terms and conditions. IWMD intends to work towards consensus on an agreement that will guide the relationship of IWMD and the City, and address the City's interests regarding the expansion of the FRB Landfill. While the mitigation measures set forth in the EIR fully address the project's identified impacts, the agreement has the ability to provide for additional responses to the City's concerns in a mutually acceptable manner.

S2-17 The traffic and associated air quality and noise analysis for the EIR considered impacts of an increase in existing (calendar year 2004) truck traffic due to an increase in high tonnage for MSW; assuming exempt material traffic remained the same. The future traffic generation of 1,053 one-way truck trips analyzed for the proposed project would support a total of 12,975 tpd of both MSW and exempt materials. Since the total tonnage analyzed for the proposed project is to address an 8 percent increase in high tonnage days and the annual average tonnage is not changing significantly from existing operations, IWMD is able to handle and process all materials delivered to the site.

S2-18 As presented in Response S2-17, the traffic and associated air and noise analysis is based on an analysis of 1,053 one-way truck trips which support 12,975 tpd of total materials brought to the site. At the annual average 8,500 tpd of general MSW, a tonnage of 4,475 tpd of non-MSW exempt material would be supported by the EIR traffic, air and noise analysis. On peak days of 11,500 tpd of general MSW, 1,475 tpd of non-MSW exempt material would be supported by the EIR traffic, air and noise analysis. The mix of general MSW and exempt waste varies from day to day but is not projected to exceed a peak or maximum total of 12,975 tpd.

The projection for the truck trips and employee vehicles is conservative enough to account for intermittent trips by construction workers and visitors.

S2-19 The following permitted tonnage limits are proposed for the project:

Permitted Total Tons per Operating Day	12,975 tpd	total
Non-Hazardous-General MSW	8,500 tpd	(annual average)
	11,500 tpd	(peak)
Exempt Materials (asphalt, PGM, soil)	1,475 tpd	(at general MSW peak)
	4,475 tpd	(at general MSW annual average)

S2-20 The currently approved geosynthetic and processed green waste alternative daily covers (ADCs) for the site are the only ADCs proposed at this time. If in the future, an ADC technology becomes available that is easier to use, more economical or can increase refuse density, proper approvals from the CIWMB, RWQCB and LEA for use of that ADC will be pursued by the IWMD.

S2-21 Statement is correct.

S2-22 The reference to compostable material in Section 4.4.3 of the Draft EIR relates to compostable material defined in the California Code of Regulations, Title 14, Section 17850, as “any organic material that when accumulated will become active compost as defined in 14 CCR, Section 17852 (a)(1).” Although the FRB Landfill accepts municipal solid waste that is compostable such as tree and lawn clippings, leaves and brush and food wastes, the handling of that material would not require special handling or necessitate the development of an Odor Impact Minimization Plan required in 14 CCR, Section 17850 (requested in CIWMB NOP comment letter dated August 11, 2005) beyond the odor control measures included in the existing permit document (Joint Technical Document) for the site. The statement in Section 4.4.3 of the Draft EIR that indicates that the site does not handle compostable material will be revised and clarified by reference as follows:

“The FRB Landfill does not handle compostable material defined in 14 CCR, Section 17850 as “any organic material that when accumulated will become active compost as defined in 14 CCR, Section 17852 (a)(1).”

S2-23 Comment noted. The Mitigation Monitoring and Reporting Program will identify appropriate agencies that will be responsible for enforcing the project mitigation measures. The IWMD will coordinate with these agencies to ensure they have the authority and means to comply with their obligations.

S2-24 A Statement of Overriding Considerations will be prepared as part of the Final EIR. The Statement of Overriding Considerations will be sent to the Board when the document becomes available for public release.

S2-25 Comment noted. No response necessary.

S2-26 Comment noted. No response necessary.

S2-27 Comment noted. No response necessary.

S2-28 Comment noted. No response necessary.

S2-29 Comment noted. No response necessary.

S2-30 Comment noted. No response necessary.

S2-31 Comment noted. No response necessary.

S2-32 Comment noted. No response necessary.

S2-33 Comments noted. Copies of the requested documents will be provided to CIWMB staff.

S2-34 Comment noted. The Notice of Determination will be filed with both the County Clerk and the State Clearinghouse within five working days of certification of the Final EIR.

S2-35 Comment noted. The IWMD will provide responses to the Board staff's comments ten (10) days prior to certification of the Final EIR.

S2-36 Comment noted. The IWMD will provide notice of the public hearing.

S2-37 Comment noted. No response necessary.



Arnold  
Schwarzenegger  
Governor

STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



Sean Walsh  
Director

March 10, 2006

S3

Cymantha Atkinson  
Orange County Integrated Waste Management Department  
320 N. Flower Street, Suite 400  
Santa Ana, CA 92703

Subject: Regional Landfill Options for Orange County (RELOOC) Strategic Plan - Frank R. Bowerman  
(FRB) Landfill Implementation  
SCH#: 2005071102

Dear Cymantha Atkinson:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on March 9, 2006, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

S3-1

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

S3-2

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

S3-3

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

S3-4

Sincerely,

Terry Roberts  
Director, State Clearinghouse

Enclosures  
cc: Resources Agency

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2005071102  
**Project Title** Regional Landfill Options for Orange County (RELOOC) Strategic Plan - Frank R. Bowerman (FRB)  
**Lead Agency** Landfill Implementation  
Orange County Department of Integrated Waste Management

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**Type** EIR Draft EIR  
**Description** The proposed project includes: (1) phased vertical and horizontal expansions of the FRB Landfill within the existing property boundary; (2) temporary disturbance outside the property boundary for slope stabilization and remediation, to remediate the effects of the 2002 landslide; (3) an annual average of 8,500 tons per day (TPD) with an increase in the daily maximum to 11,500 TPD; (4) a Soil Management Plan that preserves adjacent canyons by stockpiling operational dirt on the landfill site and (5) provisions to ensure that plant and animal habitats on the landfill property continue to be planned for and protected.

---

**Lead Agency Contact**

**Name** Cymantha Atkinson  
**Agency** Orange County Integrated Waste Management Department  
**Phone** (949) 337-5014 **Fax**  
**email**  
**Address** 320 N. Flower Street, Suite 400  
**City** Santa Ana **State** CA **Zip** 92703

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**Project Location**

**County** Orange  
**City** Irvine  
**Region**  
**Cross Streets** Sand Canyon Avenue and Portola Parkway  
**Parcel No.**  
**Township** 5S **Range** 8W **Section** 118, **Base** El Toro

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**Proximity to:**

**Highways** SR 133 and SR 241  
**Airports** Marine Corps Air Station El Toro  
**Railways**  
**Waterways**  
**Schools**  
**Land Use** Public Facilities / Landfil Site (4(LS)) and County of Orange Zoning designation - Public Facilities

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**Project Issues** Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Other Issues; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Septic System; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife

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**Reviewing Agencies** Resources Agency; Regional Water Quality Control Board, Region 8; Department of Parks and Recreation; Native American Heritage Commission; Integrated Waste Management Board; Office of Historic Preservation; Department of Fish and Game, Region 5; Department of Water Resources; California Highway Patrol; Caltrans, District 12; Caltrans, Division of Aeronautics; Department of Toxic Substances Control

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**Date Received** 01/24/2006 **Start of Review** 01/24/2006 **End of Review** 03/09/2006



**S3     RESPONSES TO COMMENTS FROM THE STATE OF CALIFORNIA  
GOVERNOR’S OFFICE OF PLANNING AND RESEARCH DATED MARCH 10,  
2006**

S3-1    Comment noted. No response necessary.

S3-2    Comment noted. No response necessary.

S3-3    Comment noted. No response necessary.

S3-4    Comment noted. No response necessary.

## **REGIONAL AND LOCAL AGENCIES**

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# COUNTY OF ORANGE

## RESOURCES & DEVELOPMENT MANAGEMENT DEPARTMENT

Bryan Speegle, Director  
300 N. Flower Street  
Santa Ana, CA  
P.O. Box 4048  
Santa Ana, CA 92702-4048  
Telephone: (714) 834-2300  
Fax: (714) 834-5188

File: DR-EIR  
LI-WR-Admin

**DATE:** February 28, 2006

**TO:** Cymantha Atkinson, Integrated Waste Management Department

R1

**FROM:** Manager, Harbors, Beaches & Parks-Program Management

**SUBJECT:** Draft EIR 604/Frank R. Bowerman Landfill Strategic Plan/Integrated Waste Management Department

HBP Program Management staff has reviewed subject documentation and offers the following comments:

R1-1

*A. Anticipated Current Landfill Closure:*

1. Page 1-1 indicates a current landfill closure date of 2022, an apparent inconsistency with Page 1-7, wherein project site life is cited as 2014. It is recommended the document be revised for internal consistency.

R1-2

*B. County Property Permit:*

1. A County Property Permit from RDMD will be required for offsite geotechnical remediation activities within Limestone Canyon & Whiting Ranch Wilderness Park.

R1-3

*C. Aesthetics:*

1. Page 5.9-1; revise "Limestone Canyon Regional Park" to correctly read "Limestone Canyon & Whiting Ranch Wilderness Park".
2. Page 5.9-2, Figure 5.9-1, Landfill and Surrounding Area; change to read per the previous page comment.
3. Page 5.9-19; revise per Page 5.9-1 comment.
4. Page 5.9-19, Section 5.9.4.6, Views from Other Locations:
  - a. Analysis should incorporate views from contiguous park parcels adjacent the landfill (i.e., Management Open Space Area C and Management Unit III of the Fourth Amendment to Irrevocable Offer of Dedication, Limestone-Whiting Wilderness Park [

R1-4

R1-5

R1-6

R1-7

Location Map attached)).

R1-7

View impacts from the park at these locations appear plausible and should be acknowledged within the DEIR.

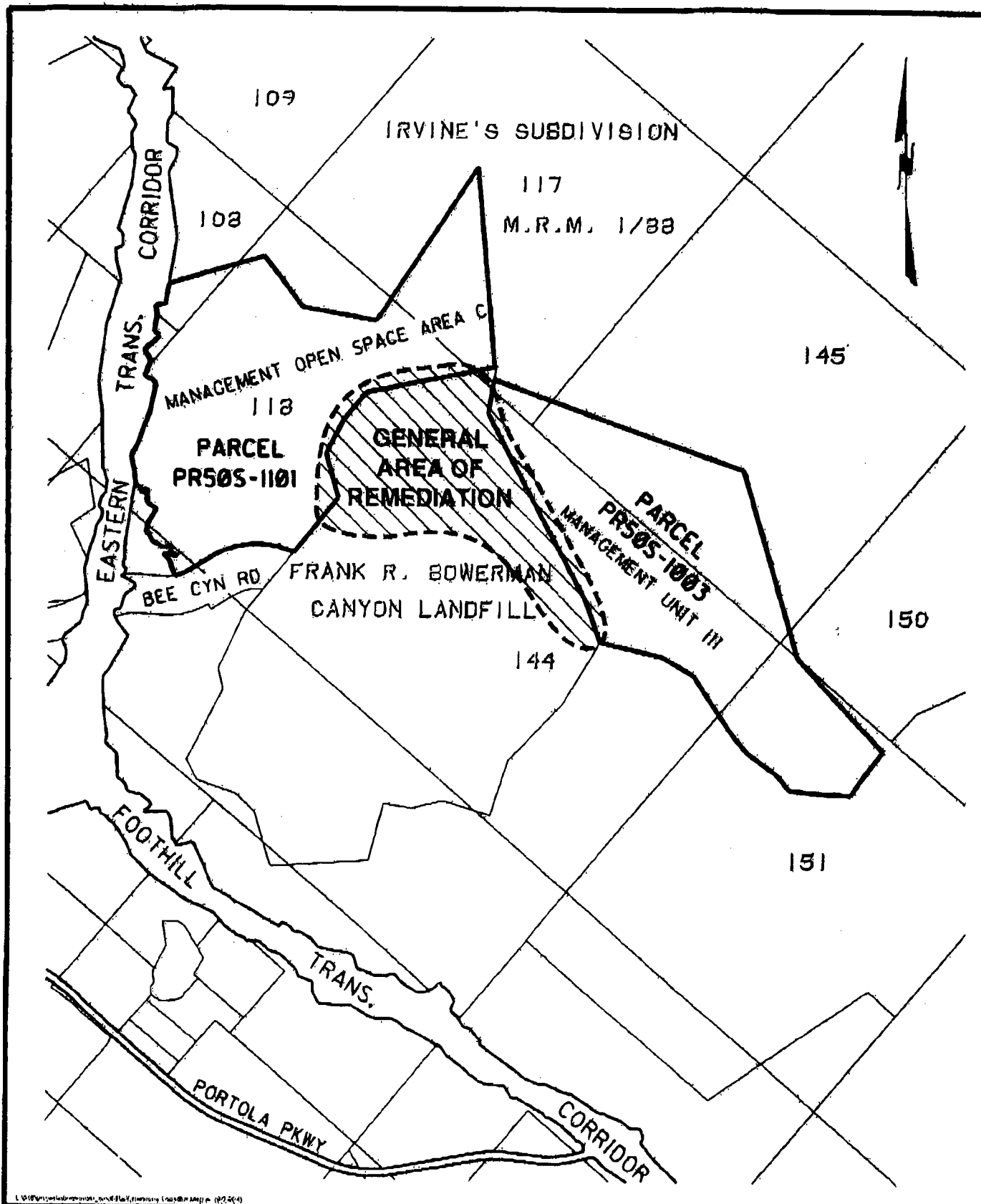
R1-8

Thank you for the opportunity to comment. Should you have any questions, please contact me at (714) 834-6779 or Wayne Johnson of my staff at (714) 834-6787.

R1-9

  
Bob Hamilton

Attachment: Location Map, Limestone Regional Park Addition  
wj/eh02986



ORANGE COUNTY RESOURCES & DEVELOPMENT MGMT. DEPT.  
RIGHT - OF - WAY ENGINEERING

LOCATION MAP

PROJECT : LIMESTONE REGIONAL PARK ADDITION

SCALE : 1" = 2000'

ID #2002-090  
ID #2003-035

— ATTACHMENT —

**R1    RESPONSES TO COMMENTS FROM THE COUNTY OF ORANGE  
RESOURCES AND DEVELOPMENT MANAGEMENT DEPARTMENT DATED  
FEBRUARY 28, 2006**

R1-1    Comment noted. Refer to responses to comments R1-2 to R1-9 below.

R1-2    The FRB Landfill has a permitted closure date of 2022. However, a major landslide which occurred in 2002 has effectively reduced the permitted closure date and remaining disposal area for the site. Therefore, the decrease in remaining available air space has, in effect, reduced the projected site life to 2014.

R1-3    Comment noted. The IWMD will obtain a County Property Permit from RDMD prior to any geotechnical remediation activities within the Limestone Canyon & Whiting Ranch Wilderness Park.

R1-4    Comment noted. The second paragraph on page 5.9-1 of the DEIR is corrected by reference to read: “Limestone Canyon & Whiting Ranch Wilderness Park” instead of “Limestone Canyon Regional Park.”

The third paragraph on page 5.9-1 of the DEIR is corrected by reference to read: “Limestone Canyon & Whiting Ranch Wilderness Park” instead of “Limestone Canyon Regional Park.”

The fourth paragraph on page 5.9-1 of the DEIR is corrected by reference to read: “Limestone Canyon & Whiting Ranch Wilderness Park” instead of “Limestone Canyon Regional Park.”

R1-5    Comment noted. A copy of Figure 5.9-1 is attached, following the last page of the responses to comments letter R1, as an information item.

R1-6    Comment noted. The first paragraph on page 5.9-19 of the DEIR is corrected by reference to read: “Limestone Canyon & Whiting Ranch Wilderness Park” instead of “Limestone Canyon Regional Park.”

R1-7    The DEIR includes an analysis of views from Limestone Canyon & Whiting Ranch Wilderness Park. Existing views of the landfill from Limestone Canyon & Whiting Ranch Wilderness Park are described in Section 5.9.1.1 (Existing Views), third paragraph on page 5.9-1 of the DEIR, which states:

“From elevated areas north and northeast of the landfill in the southwest part of Limestone Canyon & Whiting Ranch Wilderness Park the existing landfilling operations are visible including refuse deposition, application of daily cover, waste hauling vehicles, and operations equipment including compactors, bulldozers, and earthmovers.”

Views of the proposed landfill from Limestone Canyon & Whiting Ranch Wilderness Park are described in Section 5.9.4.6 (Views from Other Locations) on page 5.9-19 of the DEIR, which states:

“As described earlier, the landfill is visible from the southwest part of Limestone Canyon & Whiting Ranch Wilderness Park that is on Loma Ridge at an elevation above the landfill. Views from the park of the landfill also include extensive areas of the surrounding communities and developed land uses in these communities described earlier in this section. The proposed landfill will be below Loma Ridge and will obscure some of the lower elevations of the Santiago Hills, but would not substantially change the views of the surrounding urban area. Therefore, implementation of the proposed landfill expansion would not result in adverse visual impacts from Limestone Canyon & Whiting Ranch Wilderness Park.”

R1-8 Comment noted. Refer to response to comment R1-7, above.

R1-9 Comment noted. No response necessary.







SEAN JOYCE, City Manager

www.ci.irvine.ca.us

City of Irvine, One Civic Center Plaza, P.O. Box 19575, Irvine, California 92623-9575 (949) 724-6241

*Transmitted via E-mail  
Original to Follow via US Mail*

R2

March 7, 2006

Ms. Cymantha Atkinson  
County of Orange, Integrated Waste Management Department  
320 North Flower Street, Suite 400  
Santa Ana, CA 92703

**Subject: Draft EIR – Regional Landfill Options for Orange County (RELOOC)  
Strategic Plan – Frank R. Bowerman Landfill Implementation**

Dear Ms. Atkinson:

The City of Irvine has concluded its review of the Draft Environmental Impact Report for the above referenced project and we thank you for the opportunity to do so.

R2-1

While we understand and concur with the goals of the County's plan to expand local landfill capacity to enable Orange County residents, businesses, and agencies to avoid the higher costs of transporting waste to out-of-County landfills, and to allow for continued local control over landfill disposal fees, we are providing the attached comments to ensure that impacts to our community from the project are effectively addressed and mitigated.

R2-2

Aside from this environmental review process, an amendment to the existing Settlement Agreement between the City of Irvine and County of Orange must be negotiated and an agreement reached before any expansion or modification of Frank R. Bowerman Landfill can be implemented. The City anticipates that there may be additional issues and impacts not specifically addressed in our attached comments that will need to be considered, mitigated, or otherwise addressed during the course of our negotiation of the amendment to the Settlement Agreement. Therefore, the City of Irvine reserves the unqualified right to present any such matters or concerns to the County of Orange as part of the upcoming negotiation process.

R2-3



PRINTED ON RECYCLED PAPER

Ms. Cymantha Atkinson  
March 7, 2006  
Page 2

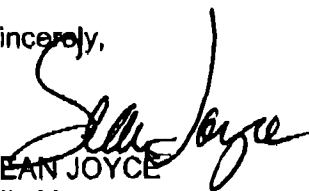
Also attached is a letter from the Orange County Great Park expressing concurrence with the City of Irvine's comments.

R2-4

We welcome further information regarding this project as it becomes available. If you have any questions or comments regarding this matter, please contact Public Works Director, Marty Bryant at (949) 724-7340.

R2-5

Sincerely,



SEAN JOYCE  
City Manager

Enclosures:

1. Exhibit 1 – City of Irvine comments to County Draft EIR No. 604
  2. Exhibit 2 – Comment letter from Orange County Great Park
- c: Marty Bryant, Director of Public Works  
Tina Christiansen, Director of Community Development  
Marcia Beckett, Fiscal & Environmental Programs Administrator  
Brian Fisk, Manager of Planning Services  
Michael Byrne, Sr. Management Analyst  
Barry Curtis, Principal Planner  
David Law, Senior Planner  
David Melvold, Resident

**COMMENTS FROM CITY OF IRVINE  
ON DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR) NO. 604  
REGIONAL LANDFILL OPTIONS FOR ORANGE COUNTY (RELOOC)  
STRATEGIC PLAN – FRANK R. BOWERMAN LANDFILL IMPLEMENTATION**

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**LAND USE AND PLANNING:**

- |   |       |
|---|-------|
| 1. To ensure that the proposed project is consistent with the City of Irvine General Plan Objective H-1: Solid Waste and the policies that support this objective provide responses to the following comment:   | R2-6  |
| 1.1. Provide documentation or supporting information demonstrating that alternative waste disposal methods and technology with emphasis on reuse of solid waste materials and on waste-to-energy analysis has or will be conducted as part of the proposal environmental analysis (General Plan Policy H-1 (b)). Please provide a page reference that addresses this comment.   | R2-7  |
| 2. Page 5.1-3 Table 5.1-1: Remove all references to Planning Area 2, as this planning area has been merged into Planning Area 1.  | R2-8  |
| 3. Revise Figure 5.9-1 to include land (Planning Area 1) that has been recently annexed to the City. Please see the marked-up exhibit for more information (Attachment 1).  | R2-9  |
| 4. Page 5.7-18, Table 5.7-8: Revise the table to include existing noise level readings without the project. It is unclear whether any noise increases will occur as a result of the proposal. It appears the table addresses the following noise impacts: existing w/project, 2030 w/out project, and 2030 w/project. Please ensure the table clearly demonstrates the actual anticipated noise impacts of the project between 6:00 and 7:00 AM. Additionally, per Comment #7 below, please revise the table to include noise measurements and projected impacts for approved residential developments south of the 241 and east of the 133 toll roads. | R2-10 |
| Additionally, the proposed project will result in the identified noise impacts affecting the City of Irvine for an additional 31 years beyond the current condition. The EIR should analyze this impact and identify any mitigation measures which may address this issue in whole or in part.  | R2-11 |

- |   |       |
|---|-------|
| 5. Page 1-16, Mitigation Measure B-1: Verify that the 167.7 acres of land used to compensate for the loss of 138.34 acres of coastal sage scrub is part of the NCCP.  | R2-12 |
| 6. The noise analysis did not include noise measurements for future planned residences south of the 241 and east of the 133 toll roads. Please provide noise measurements and analysis for this area as it is closer to the landfill than the residential areas previously surveyed as indicated on Figure 5.7-1 of the EIR. Please refer to Figure 5.1-1, City of Irvine Land Use Designations for areas near the toll road where residential uses have been approved.   | R2-13 |
| 7. In order to properly evaluate the aesthetic impact of the proposed landfill upon future planned residences south of the 241 toll road (as discussed in Comment #7), please provide a visual simulation of View #7 looking north toward the landfill from the toll road.  | R2-14 |
| 8. Section 5.9.6 states the following:  | R2-15 |
| "The proposed landfill expansion would obstruct part of the Santiago Hills and Loma Ridge, which are scenic resources, from points 1, 2, and 3. Also, these views would change from an undeveloped curvilinear ridgeline to that of a large, man-made form that highly contrasts with the adjacent rolling hills."  | R2-16 |
| The City of Irvine has serious concerns with the proposed aesthetics of the landfill expansion. As proposed, the landfill will block views of the natural ridgelines from existing and proposed residential neighborhoods and public areas in north Irvine. This impact is unacceptable. To address this issue, provide alternative landfill configurations that would create a smoother integration of the landfill into the existing topography and landscape and maintain unobstructed views of the ridgeline from existing and proposed developments and public spaces within the City of Irvine. | R2-17 |
| Additionally, the EIR indicates this is a significant impact after mitigation. IWMMD will be required to adopt a Statement of Overriding Considerations for this impact.  | R2-18 |
| 9. Section 5.9.6 further indicates that there will be no impacts on scenic highways or scenic view points. Please be advised that Figure A-4 of the Irvine General Plan, Land Use Element identifies the following routes as Natural Character Scenic Highways with Major Views of the Lomas de Santiago ridgeline:   | R2-19 |

- Sand Canyon Avenue
- Jeffrey Road
- Culver Drive

R2-19

As stated above, the proposed project will have significant impacts on these important scenic highways. Please revise the document to address this issue and identify any mitigation measures which may address this issue in whole or in part.

R2-20

10. Under the Recreation section of the Environmental Analysis Checklist the following is stated:

R2-21

"The ultimate use for the FRB Landfill, after the termination of the landfilling, is a passive regional park. That post closure park use is identified on the County of Orange Master Plan of Regional Recreational Facilities and is not a part of the proposed project."

R2-22

Although it has been stated that the future regional park is not a part of the project, the loss of the use of the park for 31 years is a direct result of the proposed landfill expansion. Thus, it is the opinion of the City of Irvine that the loss of the park and related park services should be analyzed and mitigated.

R2-23

#### **HYDROGEOLOGY AND WATER QUALITY:**

1. For the purposes of the countywide NPDES Program, this should be designated as a priority project even though it does not fall under any of the priority project categories listed in the Drainage Area Management Plan (DAMP). Therefore, treatment control BMPs should be implemented on-site to prevent untreated surface water from being discharged into Bee Canyon Wash and Hicks Canyon Wash.

R2-24

Treatment control BMPs should be selected to address the pollutants of concern in downstream receiving waters and the pollutants expected to be generated from the type of new development or significant redevelopment being proposed.

R2-25

Any pollutants of concern that are expected to be generated by the project that are causing a Clean Water Act Section 303(d) impairment of receiving waters should be considered primary pollutants of concern. Priority projects must select a single, or combination of, stormwater Treatment Control BMPs that address the particular pollutants of concern.

R2-26

- |  |              |
|--|--------------|
| <p>2. A Water Quality Management Plan (WQMP) should be submitted to the appropriate County staff for review. WQMPs may be conceptual during the discretionary approval process.</p>  | <p>R2-27</p> |
| <p>3. Prior to the issuance of any grading permit, coverage must be obtained under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waster Discharge Identification (WDID) Number. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for review on request.</p> | <p>R2-28</p> |

**TRANSPORTATION AND CIRCULATION:**

- |  |              |
|--|--------------|
| <p>1. Modify Mitigation Measure T-1 at the intersection of Sand Canyon/Trabuco to identify a specific physical improvement (i.e. addition of travel lane, etc.) that will adequately mitigate the impacts at the intersection. Proposing ATMS strategies without a physical alternative is insufficient. Additionally, provide the appropriate Highway Capacity Manual (HCM) analysis of the "2030 without project" condition, the "2030 with project" condition and the "2030 with project, with mitigation" condition.</p> | <p>R2-29</p> |
| <p>2. Modify Mitigation Measure T-2 at the intersection of Jeffrey/Walnut to identify a specific physical improvement (i.e. addition of travel lane, etc.) that will adequately mitigate the impacts at the intersection. Provide the appropriate HCM analysis of the "2030 without project" condition, the "2030 with project" condition and the "2030 with project, with mitigation" condition.</p>  | <p>R2-30</p> |
| <p>3. It is unclear why year 2025 ICU analyses were conducted at the two impacted intersections of Jeffrey/Walnut and Sand Canyon/Trabuco when these 2025 analyses do not represent build-out conditions. Remove the year 2025 conditions and replace with year 2030 build-out conditions.</p>   | <p>R2-31</p> |
| <p>4. Page 5.5-37: The Congestion Management Program (CMP) Traffic Analysis section suggests that the project results in 162 daily trips in 2010 and 2,300 daily trips at build-out (2030). However, if the Passenger Car Equivalent (PCE) trips are analyzed per Tables 5.5-4 and 5.5-5 provided in the DEIR, the project results in 346 daily trips in 2010 and 4,911 daily trips at build-out.</p>  | <p>R2-32</p> |

These numbers suggest that a CMP Traffic Analysis is required and should be provided.

R2-32

5. Page 5.5-11: The breakdown percentage of hauling truck usage on local roadway segments is confusing. Provide the specific roadway segments with appropriate boundaries for that segment as well as the associated percentage of truck travel using that roadway segment. The sum of these percentages should equal 100 percent.

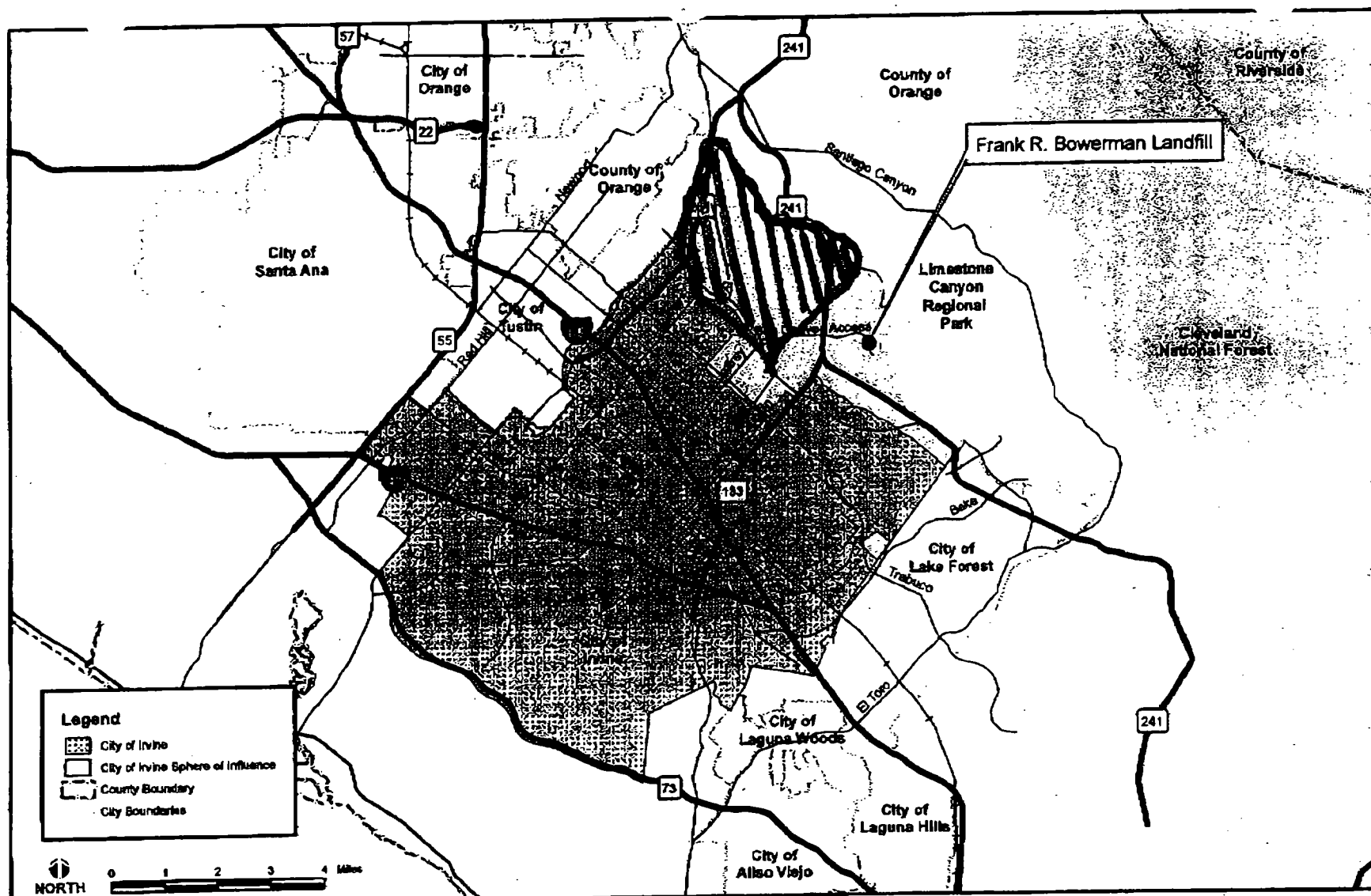
R2-33

6. Included in Section C.4 of the Settlement Agreement between the City of Irvine and the County of Orange regarding the Landfill, dated August 1, 1984 (Resolution 84-1192), the approved access routes comprise Interstate 5 freeway, Interstate 405 freeway and Sand Canyon Avenue. Therefore, the Traffic and Circulation section of the EIR should include an analysis of truck usage and associated impacts on Interstate 5 and Interstate 405 freeway routes between Jeffrey Road and State Route 133 tollway, as well as all impacted local roadway routes.

R2-34

7. An addendum to the existing Settlement Agreement between the two agencies will be required to identify fair-share costs for the reconstruction and maintenance needs of roadway facilities impacted by the Bowerman Landfill. Please incorporate this requirement as a mitigation measure within the Transportation and Circulation section of the EIR.

R2-35



Source: City of Irvine Boundary and SOI (City of Irvine, 2004); City Boundaries and Roads (Tiger, 2000).

**Figure 5.9-1**  
**Landfill and Surrounding Area**



**R2      RESPONSES TO COMMENTS FROM THE CITY OF IRVINE DATED MARCH 7, 2006**

R2-1    Comment noted. No response necessary.

R2-2    Comment noted. No response necessary.

R2-3    IWMD plans to negotiate a mutually acceptable agreement with Irvine that will guide the relationship between the City and the department. The existing Settlement Agreement was entered into by the City and the County to resolve former litigation, and it is not necessarily the appropriate legal mechanism to memorialize future terms and conditions. IWMD intends to work towards consensus on an agreement that will guide the relationship of IWMD and the City, and address the City's interests regarding the expansion of the FRB Landfill. While the mitigation measures set forth in the EIR fully address the project's identified impacts, the agreement has the ability to provide for additional responses to the City's concerns in a mutually acceptable manner.

R2-4    Comment noted. The Orange County Great Park comment letter is identified as comment letter B2 (discussed later in this report).

R2-5    Comment noted. No response necessary.

R2-6    Comment noted. Refer to response to comment R2-7, below.

R2-7    In compliance with the CEQA Guidelines Section 15126.6 (c), IWMD selected a range of potential alternatives to the proposed project that could feasibly accomplish most of the project objectives and could avoid or substantially lessen one or more of the significant effects. Potential environmental impacts associated with the alternatives to the proposed project are discussed in Sections 9.2, 9.3, 9.4, and 9.5 of the DEIR.

The use of alternative waste management technologies was included in Section 9.6 (Alternatives Considered but Rejected) of the DEIR. However, the use of alternative waste management technologies was rejected as an alternative for further consideration, as this alternative would be infeasible and would not meet the basic project objectives. It should be noted that alternative technologies are reviewed in the RELOOC Strategic Plan updates but, at this time, are not economically feasible due to the volume of waste handled by the Orange County Waste System. The following alternative technologies were evaluated in the RELOOC Feasibility Study (report dated December, 2001):

- Bio-refining (the transformation of organic material to bio-fuels and bio-chemicals).
- Bio-diesel (the conversion of cooking oils to diesel fuel).
- Composting (the conversion of MSW for a soil additive).
- Anaerobic digestions (the conversion of organics to fuel gas, and fiber and liquid for a soil additive).
- Fixation (the chemical transformation of waste into inert construction products).

- Gasification (the thermal breakdown of waste to synthetic gas, ash, and water).
- Kinetic disintegration (the breakdown of waste by sound waves into aggregate and other products).
- Plasma Arc and is not feasible given existing technology (the thermal transformation of waste to gases and stable products) and the unique air quality conditions and standards for the Southern California air basin.
- Pyrolysis (the thermal breakdown of waste in the absence of oxygen to gas, liquids, and solid products).
- Waste-to-energy (combustion of MSW, either mass-burn or RDF, for the creation of steam and electricity).

These technologies were researched and, with the exception of composting technologies, there was only one full scale, reference plant processing MSW in North America for any of the alternative technologies researched. That was an anaerobic digestion plant in Newmarket, Ontario which is designed to process 650 TPD. Therefore, while these technologies hold promise for the future, their application for use in Orange County at this time is speculative given the exclusivity of the technology application in the United States. Most of these alternative technologies have only been tested on small scale pilot projects which would not be applicable to the waste volume to be handled for the FRB Landfill or other Orange County landfills. Technologies resulting in more efficient use of the available capacity at the landfills continue to be studied, but as an adjunct to capacity needs not as an alternative to the proposed FRB Landfill project.

In addition to the evaluation that occurred in the report dated December 2001, IWMD also updated the RELOOC Strategic Plan in September 2005. The 2005 report focused on those technologies with the highest potential for application within the landfill system. The technologies further studied included the following:

- Aerobic Digestion
- Gasification
- Plasma Arc
- Pyrolysis
- Hydrolysis (new technology not previously evaluated which is the breakdown of organic materials through use of water).

R2-8 Comment noted. Table 5.1-1 on page 5.1-3 of the DEIR is corrected by reference to read: “Planning Area 1” instead of “Planning Area 2.”

R2-9 Comment noted. Figure 5.9-1 has been revised to reflect recent annexation of Planning Area 1. A copy of Figure 5.9-1 is attached, following the last page of the responses to comments letter R1.

R2-10 The existing noise is the same with or without the project and an additional column with the same dB numbers would not be necessary. The existing noise level is for 2005. The project would not occur until sometime in the future, thus any noise associated with “project” activities is not happening in the present. Therefore the “existing” noise level is

presented in the table, irrespective of any future activity including “the project.” It should be noted that due to the distance and the landform shielding the development south of the 241 and east of the 133, no noise measurements nor any noise modeling was conducted in that area. In addition, the CEQA analysis is to be based on the existing condition which includes landfill operations and that the noise levels based on non-operation are addressed in the no project discussion.

The noise analysis for the future planned residential land uses was performed for construction and operational noise and is discussed in Sections 5.7.4.1 and 5.7.4.2 of the DEIR. The following excerpt is from Section 5.7.4.1 (Construction Noise).

“At a distance of 1,600 feet (the approximate distance from the construction activity to the nearest existing or planned residential land use), the noise level from construction activity would be approximately 59 dBA  $L_{eq}/L_{50}$ . Attenuation due to soft ground effects and atmospheric absorption would reduce these noise levels by approximately 4.5 dB and 1.5 dB, respectively, yielding 53 dBA  $L_{eq}/L_{50}$ . This noise level is within the noise limits permitted by City of Irvine regulations. Also, this noise level would not substantially increase the ambient noise level either permanently, temporarily or intermittently in noise-sensitive locations. Project construction activity would not cause an adverse environmental impact. To be conservative, the noise analysis prepared by URS Corporation did not take account for additional attenuating circumstances where intervening terrain between the construction/refuse activity and the nearest planned residences acts as a noise barrier providing an additional 5 dB noise reduction. This would be the case for much of the activity at the FRB Landfill. Thus, the noise level from on-site FRB Landfill activities at the nearest existing or planned residential land use would typically be approximately 48 dBA  $L_{50}$  or less.”

The construction noise sources are also considered part of normal operations on the landfill site. The flare station is another noise source which is also discussed in the DEIR. The following excerpt is from Section 5.7.4.2 (Operational Noise).

“An additional on-site operational noise source is the flaring station. Based on the ST-2 measurements, the overall noise from the flaring station is 62 dBA  $L_{eq}/L_{50}$  at a distance of 100 feet. This noise level would reduce to 38 dBA  $L_{eq}/L_{50}$  at a distance of 1,600 feet away, without accounting for soft ground propagation, atmospheric absorption or landform shielding. Thus, flare noise would likely be inaudible at any off-site location and is an insignificant noise source.”

Thus, any noise-sensitive development (e.g., residential) more than 1,600 feet from the on-site landfill activity would not be adversely impacted by the proposed project.

As indicated in the noise analysis in Section 5.7.4.4, the proposed project would not make a significant difference in noise levels during the hours of 6:00 A.M. to 7:00 A.M. Therefore, the proposed project itself would not perceptibly increase noise levels.

R2-11 The noise analysis did address the future post-closure condition versus the project expansion/extension and found no substantive noise exposure difference except on Bee

Canyon Access Road itself as discussed in Section 5.7.4.3 (Off-Site Project Related Traffic Noise) of the DEIR.

R2-12 This land is part of the Major Amendment currently being reviewed by the Nature Reserve of Orange County (NROC). If approved, this land will be part of the NCCP.

R2-13 Comment noted. Refer to response to comment R2-10, above.

R2-14 The photograph of View 7 was taken from the paved edge of SR 241. There is a knoll between SR 241 and points to the southwest. This knoll blocks views of the current landfill from nearby points to the south, except from locations at the top of the knoll. The area south of Viewpoint 7 is planned for medium density residential. As this area has topographic relief, it would undergo grading during residential development. As the final grades are not known at this time, it is not possible to provide a visual simulation that would be representative of views from future residences.

R2-15 Comment noted. No response necessary.

R2-16 Comment noted. No response necessary.

R2-17 The EIR acknowledges that views of Loma Ridge will be partially blocked from some locations in existing and proposed residential neighborhoods and public areas in north Irvine that currently have views of this ridge. However, views of the ridge from most locations within existing neighborhoods and parks are currently blocked by near-by existing residential buildings, and landscaping, including trees. These locations have no view of the ridgeline and will have no view of the proposed landfill expansion because of the intervening features. Locations in residential developments or parks at the edges closest to the landfill have the greatest likelihood of having current views of the ridge, but in most cases views from these locations are blocked by street trees and/or buildings in adjacent developments.

Visual simulations that show views across open areas planned for future development show a “worst case” of landfill blockage of Loma Ridge. This is because once these areas are developed, structures and landscaping will block most views of the ridge and landfill. This is the case for Visual Simulations 1B, 2B and 3B. A worst-case condition at closure (in 2053) was also assumed for the visual simulations which does not account for anticipated settlement of up to 50 feet (most of which will occur in the first five years after closure). It should also be noted that the visual simulations provided in the DEIR do not capture the entire view that a person would see from the given location as the eye moves across the distant landscape. Therefore, a viewer at these locations would see a larger segment of the unobstructed ridge than is shown in the simulations due to the limitations of the photo width. More representative Figures R2-1 through R2-4] (Figures are attached following the last page of the responses to comments letter R2, as an information item) show panoramic views of Visual Simulations 2 and 3 taking into account landfill settlement and landscape blending with adjacent hillside landscape.

Much more of Loma Ridge is visible in Figures R2-1 through R2-4 taking into account a more panoramic view and the effects of landfill settlement.

Figure R2-5 (following the last page of the responses to comments letter R2, as an information item) shows general areas in undeveloped Irvine that could potentially have existing views along Loma Ridge blocked by the proposed landfill expansion (a mid-point along the ridge was taken for the figure). Most of the affected areas are planned for future development. This figure is based on existing topographical mapping and does not account for the structures and landscaping/trees in future development that would block views of both Loma Ridge and the landfill. Also, as stated on page 5.9-11 sensitive viewers are considered those that have a view from either a residential use or from a park. Views from other land uses are not considered sensitive. As shown on this figure, most areas closest to the landfill do not have views of the landfill because of intervening topography. More distant areas such as the location of Visual Simulation 4B in the DEIR have current views of the ridge that would not be blocked by the proposed landfill expansion.

It is not feasible to reconfigure the landfill to provide a more natural-appearing profile. Such reconfiguration would result in a loss of landfill capacity that would conflict with the RELOOC Strategic Plan goal/objective to maximize capacity of the existing landfills, including the FRB Landfill.

R2-18 Comment noted. A Statement of Overriding Considerations will be prepared as part of the Final EIR.

R2-19 Comment noted. The following text will be added to the EIR.

Section 5.9.1.9, following the third paragraph:

“The City of Irvine General Plan, Land Use Element identifies Sand Canyon Avenue, Jeffrey Road, and Culver Drive as Natural Character Scenic Highways with Major Views of the Lomas de Santiago ridgeline.”

Section 5.9.3, first paragraph would be changed as follows:

“To determine the visual impacts related to the proposed landfill expansion, sensitive viewers who would have views of the expansion areas of the landfill property were identified. These sensitive viewers include viewers from existing and planned residential and park uses, and viewers from City-designated scenic highways.”

Section 5.9.4.8, the second paragraph would be revised as follows:

“There are no state- or County-designated scenic highways in the immediate vicinity of the landfill. Santiago Canyon Road north and east of the landfill is designated by the County of Orange as a scenic viewscape corridor. However, there would be no views of the proposed landfill from this road, as the Santiago Hills including Loma Ridge would

block views of the landfill. Therefore, there would be no visual impacts related to the scenic viewscape corridor of Santiago Canyon Road associated with implementation of the proposed landfill expansion. The City of Irvine General Plan, Land Use Element identifies Sand Canyon Avenue, Jeffrey Road, and Culver Drive as Natural Character Scenic Highways with Major Views of the Lomas de Santiago ridgeline. Therefore, users of these roads would be considered sensitive viewers to visual changes. Views of part of Loma Ridge from points along these roads would be blocked by the proposed landfill expansion. As described previously for visual simulations 1, 2 and 3, impacts to views of Loma Ridge would be considered adverse and significant. There would be no impact related to resources within a state scenic highway because Sand Canyon Avenue, Jeffrey Road, and Culver Drive are City of Irvine designated scenic highways, rather than state designated scenic highways.”

Section 5.9.6, the first paragraph will be revised as follows:

“Mitigation measure AS-1 requires that the landfill expansion areas be vegetated with native CSS species occurring in adjacent areas to assist in blending the expanded landfill with surrounding undeveloped hills. With implementation of this measure, the appearance of the expanded landfill will be as shown in the visual simulations on Figure 5.9-4. However, as described earlier for visual simulations 1, 2, and 3, and points along Canyon Avenue, Jeffrey Road, and Culver Drive, which are City-designated scenic highways, the adverse visual impacts of the proposed expansion would be significant even with implementation of mitigation measure AS-1. This is because the proposed landfill expansion would obstruct part of the Santiago Hills and Loma Ridge, which are scenic resources, from view points 1, 2, and 3 and points along the City-designated highways. Also, these views would change from an undeveloped curvilinear ridgeline to that of a large, man-made form that highly contrasts with the adjacent rolling hills.”

R2-20 Comment noted. Refer to response to comment R2-19, above.

R2-21 Comment noted. No response necessary.

R2-22 Comment noted. No response necessary.

R2-23 To date, no specific acreage for the future passive regional park on the FRB Landfill property has been designated. No specific uses for this park, other than its identification as a passive use regional park following closure of the landfill, has been identified at this time. Therefore, it is not known what amenities and activities might be provided at this park in the future and when this park will be implemented. The extension of the landfill operations from 2022 to approximately 2053 would delay this planned park use; however, because this park is not currently programmed and specific funding is not identified, this is not considered a significant adverse impact and no mitigation is necessary. No development approvals or future growth have relied on the accessibility and availability of this end use.

R2-24 The IWMD continues to implement water quality protection measures for their operations with on-site controls for stormwater and sediment discharges downstream of the landfill. These water quality protection measures will ensure that residential communities in the City of Irvine are not impacted by stormwater or sediment discharges from current and future landfill operations. Treatment control BMPs are currently implemented on-site as part of the IWMD Industrial NPDES General Permit for Stormwater Discharges Associated with Industrial Activities (CAS #000001) for discharges to downstream Bee Canyon Wash. Any surface water which drains into Hick's Canyon Wash is not from the active landfill waste footprint area. However, proper BMPs will be implemented for any areas subject to activities associated with the landfill. The monitoring and performance of these BMPs is reported annually to the RWQCB as part of the site-specific Stormwater Pollution Prevention Plan (SWPPP) and Monitoring and Reporting Requirements (M&RP), for the landfill. IWMD will continue to coordinate with RDMD to comply with requirements of the County's Drainage Area Management Plan (DAMP). Section 5.4.4.3 of the Draft EIR, last paragraph will be revised to reflect the above as follows:

“The FRB Landfill will continue to comply with its industrial and construction NPDES permit requirements including implementation of a SWPPP and employment of BMPs. Annual reports will continue to be submitted to the RWQCB and will be updated as the landfill development progresses. In addition to ongoing compliance with industrial and construction NPDES permit requirements, IWMD will continue to coordinate with RDMD on compliance with municipal NPDES permit requirements of the County's Drainage Area Management Plan and associated Water Quality Management Plan, as necessary, for full implementation of the MDP.”

R2-25 The on-site treatment control systems at the FRB Landfill are a Continuous Deflection System and a system of multiple basins. The primary treatment control is the downstream Bee Canyon Retarding Basin just north of the 241 Toll Road.

R2-26 Pollutants of concern and Clean Water Act Section 303(d) Impairment of Receiving Waters would be evaluated as part of a Water Quality Management Plan in compliance with the County's Drainage Area Management Plan, as required by RDMD.

R2-27 A specific Water Quality Management Plan (WQMP) prepared under the County's Drainage Area Management Plan (DAMP) has not been required for the landfill; however, IWMD will coordinate with RDMD on WQMP requirements for future operations. The site continues to employ treatment control BMP's under a SWPPP and M&RP in compliance with the site's NPDES General Industrial Permit which generally follows the intent of the DAMP WQMP.

R2-28 Currently the landfill operations and activities are covered under its General Industrial Permit for large grading projects which are conducted by third-party contractors. The site has submitted an NOI for the NPDES General Permit for Stormwater Discharges Associated with Industrial Activities (Facility WDID 8 30S005261). Under Section E.7 of the General Permit, the regulated party is covered for its primary activity (landfilling)

and related activities, including construction, as long as BMPs appropriate for the various activities are used and monitored. According to Section E.7 of the General Permit No. CAS000001:

*Facility operators that operate facilities with co-located industrial activities (facilities that have industrial activities that meet more than one of the descriptions in Attachment 1) that are contiguous to one another are authorized to file a single NOI to comply with the General Permit. Storm water discharges and authorized non-storm water discharges from the co-located industrial activities are authorized if the SWPPP and Monitoring Program addresses each co-located industrial activity.*

Following consultation with the RWQCB, in order to avoid unnecessary overlap in the General Permit requirements, the IWMD is allowed to apply, and has applied, for coverage under the Industrial General Permit for its primary activity (landfilling sanitary wastes). At its discretion, and as an additional measure of compliance, the County IWMD may request the Contractor to apply for coverage under the NPDES Construction General Permit. The County would then require the Contractor to obtain an NPDES permit for construction activities which include the preparation of a Storm Water Pollution Prevention Plan (SWPPP), submittal of a Notice of Intent (NOI) and the issuance of a Water Discharge Identification (WDID) number.

Copies of the General Industrial Permit for the landfill facility are available on-site for review.

- R2-29 Mitigation Measure T-1 of the DEIR includes a discussion of the intersection LOS before and after implementation of T-1. Mitigation Measure T-1 improves the A.M. peak hour LOS of Sand Canyon Avenue at Trabuco Road in 2030 with the proposed project from an unacceptable LOS E to an acceptable LOS D. Therefore, Mitigation Measure T-1 mitigates the significant adverse traffic impact at Sand Canyon Avenue/Trabuco Road in 2030 to below a level of significance. No additional mitigation measures at Sand Canyon Avenue/Trabuco Road are necessary.

Signalized intersections can be analyzed using either the Highway Capacity Manual (HCM) methodology or the Intersection Capacity Utilization (ICU) methodology. The HCM methodology determines the LOS for a signalized intersection based on the average control delay per vehicle. The ICU methodology determines the LOS for a signalized intersection based on the capacity of the intersection. The City of Irvine has adopted the ICU methodology to determine the LOS for a signalized intersection as outlined in the City of Irvine Traffic Impact Analysis Guidelines. Therefore, the intersection of Sand Canyon Avenue/Trabuco Road does not need an additional intersection analysis based on the HCM methodology. It should be noted that the County of Orange also uses the ICU methodology when analyzing signalized intersections.

- R2-30 Mitigation Measure T-2 of the DEIR includes a discussion of the intersection LOS before and after implementation of T-2. Mitigation Measure T-2 improves the A.M. peak hour LOS of Jeffrey Road at Walnut Avenue in 2030 with the proposed project from an



unacceptable LOS E to an acceptable LOS D. Therefore, Mitigation Measure T-2 mitigates the significant adverse traffic impact at Jeffrey Road/Walnut Avenue in 2030 to below a level of significance. No additional mitigation measures for Jeffrey Road/Walnut Avenue are necessary.

Signalized intersections can be analyzed using either the Highway Capacity Manual (HCM) methodology or the Intersection Capacity Utilization (ICU) methodology. The HCM methodology determines the LOS for a signalized intersection based on the average control delay per vehicle. The ICU methodology determines the LOS for a signalized intersection based on the capacity of the intersection. The City of Irvine has adopted the ICU methodology to determine the LOS for a signalized intersection as outlined in the City of Irvine Traffic Impact Analysis Guidelines. Therefore, the intersection of Jeffrey Road/Walnut Avenue does not need an additional intersection based on the HCM methodology. It should be noted that the County of Orange also uses the ICU methodology when analyzing signalized intersections.

- R2-31 The traffic analysis for the DEIR analyzed the traffic conditions for both years 2025 and 2030 at Sand Canyon Avenue/Trabuco Road and at Jeffrey Road/Walnut Avenue because implementation of the proposed project would create a significant adverse traffic impact at these two intersections in 2030. As discussed in Section 1.1.3, the landfill is currently permitted to close in 2022. As discussed in Section 1.1.4, the proposed project would extend the permitted closure date of 2022 to approximately 2053. In affect, any significant adverse traffic impact occurring in 2030 because of the implementation of the proposed project may occur as early as 2022, which would result in a significant adverse traffic impact for potentially eight years.

As shown in Section 8.2 of the Traffic Study (P&D Consultants 2005) for the DEIR, the implementation of the proposed project would create a significant adverse traffic impact at the intersection of Jeffrey Road/Walnut Avenue in 2025 during the A.M. peak hour. Coincidentally, Mitigation Measure T-2 as discussed on page 5.5-39 of the DEIR would also apply to Jeffrey Road/Walnut Avenue in 2025. The Traffic Study for the DEIR can be found in Appendix F to the DEIR. Even though the 2025 analysis was not required, the 2025 analysis provided a timeframe when to implement the mitigation measures. Therefore, the 2025 analysis is appropriate.

- R2-32 The proposed project would generate 162 daily trips in 2010 and 2,300 daily trips in 2030. These daily trips would indicate that the proposed project was exempt from a CMP Traffic Analysis. A CMP Traffic Analysis would be required when a project would generate 2,400 daily trips without direct access to a CMP highway. The landfill does not have direct access to a CMP highway because the closest CMP highway is Irvine Boulevard.

However, the proposed project would generate 346 daily PCE trips in 2010 and 4,911 daily PCE trips in 2030. These daily PCE trips would indicate that the proposed project would require a CMP Traffic Analysis.

The second paragraph of Section 5.5.4.4 (Congestion Management Program (CMP) Traffic Analysis) on page 5.5-37 of the DEIR is corrected by reference to read:

“A CMP Traffic Analysis is required when a proposed project generates more than 2,400 daily trips or more than 1,600 daily trips with direct access to a CMP Highway. The CMP Highways in the vicinity of the FRB Landfill are I-5, I-405, SR 133 and Irvine Boulevard. Therefore, the FRB Landfill does not have direct access to a CMP Highway. The proposed project would result in an additional 346 daily PCE trips in 2010 and 4,911 daily PCE trips in 2030. The daily trips generated in 2010 would be less than the minimum 2,400 daily trips required for a CMP Traffic Analysis. Therefore, a CMP Traffic Analysis is not required for the proposed project for year 2010. The daily trips generated in 2030 would be greater than the minimum 2,400 daily trips required for a CMP Traffic Analysis. Therefore, a CMP Traffic Analysis is required for the proposed project for year 2030.

Orange County has established LOS E or better as the acceptable LOS for road segments and intersections on a CMP Highway System (CMPHS). Any road segment or intersection operating at LOS F was considered to be deficient.

A significant adverse traffic impact would occur on a CMPHS if implementation of the proposed project would result in one or more of the following:

- The road segment to operate at an unacceptable LOS, and an increase of the daily V/C ratio of greater than 0.03.
- The intersection to operate at an unacceptable LOS, and an increase in the ICU of greater than 0.03.

As shown in Section 5.5.4.2, all road segments and intersections on the CMPHS operate at an acceptable LOS D or better. Therefore, implementation of the proposed project would create no significant adverse impacts to the CMPHS and would be in compliance with the CMP performance standards.”

R2-33 The second paragraph under Section 5.5.3.5 on page 5.5-11 of the DEIR is corrected by reference to read:

“Approximately 13 percent of the waste hauling trucks travel on Portola Parkway west of Jeffrey Road, approximately 15 percent on Irvine Boulevard east of Sand Canyon Avenue, approximately 15 percent on Jeffrey Road and approximately 50 percent on Sand Canyon Avenue between I-5 and Irvine Boulevard. Based on the waste hauling truck traffic counts, approximately five percent of the trucks travel on Sand Canyon Avenue south of I-5. Therefore, the intersections on Sand Canyon Avenue south of I-5 were not included in the study area.”

The above paragraph represents a portion of the hauling truck usage on local roadways and segment. To view all roadways and segment trip distribution percentages for truck usage, please refer to Figure 2.5-1 of the Traffic Study (P&D Consultants 2005) for the

DEIR. As shown in Figure 2.5-1 of the Traffic Study, the trip distribution percentages total 100 percent. The Traffic Study for the DEIR can be found in Appendix F to the DEIR.

- R2-34 The traffic analysis for DEIR did not analyze the traffic impacts on I-5 and I-405 because the landfill trip generation on I-5 and I-405 was below the threshold of significance. The threshold of significance on a freeway segment is three percent of the generalized freeway capacity of 80,000 daily vehicles, which is 2,400 daily vehicles. As shown on Figures 2.5-1 and 2.5-2 of the Traffic Study (P&D Consultants 2005) for the DEIR, the landfill would generate the highest freeway traffic volumes on I-5 north of Jeffrey Road with 40 percent of the waste hauling trucks and 35 percent of the employee trips. Based on these trip distribution percentages, the landfill would generate 133 daily PCE trips in 2010 and 1,955 daily PCE trips in 2030. The daily PCE trips on I-5 north of Jeffrey Road in 2010 and 2030 are below the threshold of significance. The Traffic Study for the DEIR can be found in Appendix F to the DEIR. In addition, Caltrans has reviewed the DEIR and has no comments regarding truck usage and associated impacts on I-5 and I-405 (refer to comment letter S1).

Refer to Section 5.5.4.1 and 5.5.4.2 of the DEIR for traffic impacts to the local roads.

- R2-35 As discussed in Responses R2-29 through R2-34, Section 5.5 (Transportation and Circulation) of the DEIR adequately analyses the worst case significant environmental impacts to transportation and circulation that would result from the long-term development and operation of the project, and provides mitigation measures that reduce these significant impacts to a less than significant level. No further mitigation is required.

IWMD plans to negotiate a mutually acceptable agreement with Irvine that will guide the relationship between the City and the department. The existing Settlement Agreement was entered into by the City and the County to resolve former litigation, and it is not necessarily the appropriate legal mechanism to memorialize future terms and conditions. IWMD intends to work towards consensus on an agreement that will guide the relationship of IWMD and the city, and address the City's interests regarding the expansion of the FRB Landfill. While the mitigation measures set forth in the EIR fully address the project's identified impacts, the agreement has the ability to provide for additional responses to the City's concerns in a mutually acceptable manner.





**Visual Simulation 2C-Panoramic**  
 Proposed landfill showing settlement that occurs within five years following anticipated closure (2053) from the edge of Jeffrey Open Space Trail looking northeast.

Source: Bryan A. Stirrat & Associates (2006).

**Figure R2-1**  
**Visual Simulation 2C-Panoramic**





**Visual Simulation 2D-Panoramic**  
 Proposed landfill (delineated) showing settlement that occurs within five years following anticipated closure (2053) from the edge of Jeffrey Open Space Trail looking northeast.

Source: Bryan A. Stirrat & Associates (2006).

**Figure R2-2**  
**Visual Simulation 2D-Panoramic**



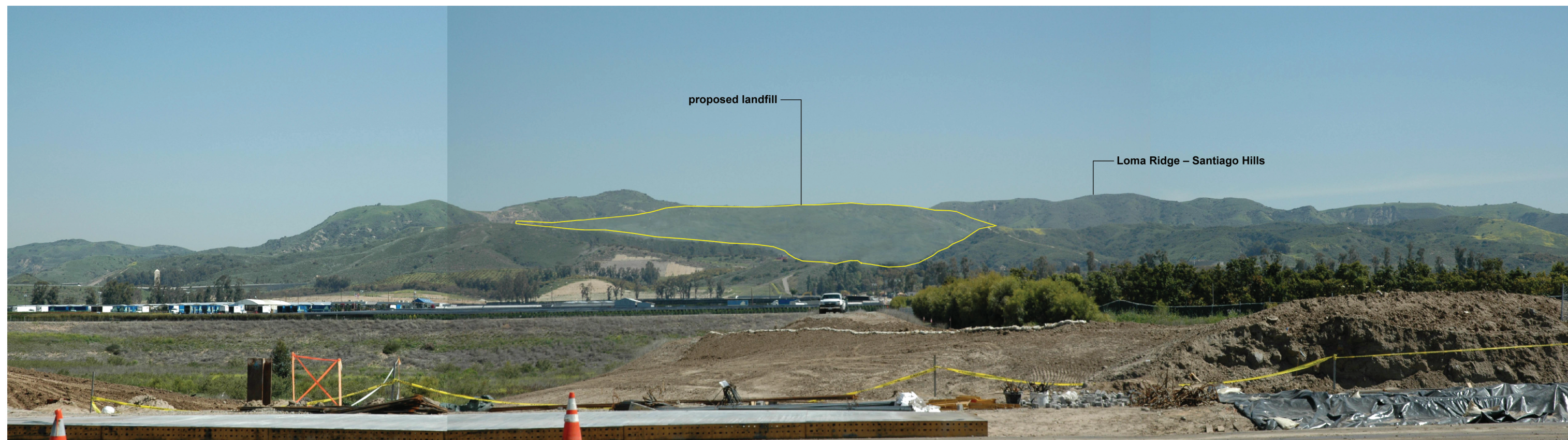


**Visual Simulation 3C-Panoramic**  
 Proposed landfill showing settlement that occurs within five years following anticipated closure (2053) from the southeast side of Irvine Boulevard looking north-northeast.

Source: Bryan A. Stirrat & Associates (2006).

**Figure R2-3**  
**Visual Simulation 3C-Panoramic**



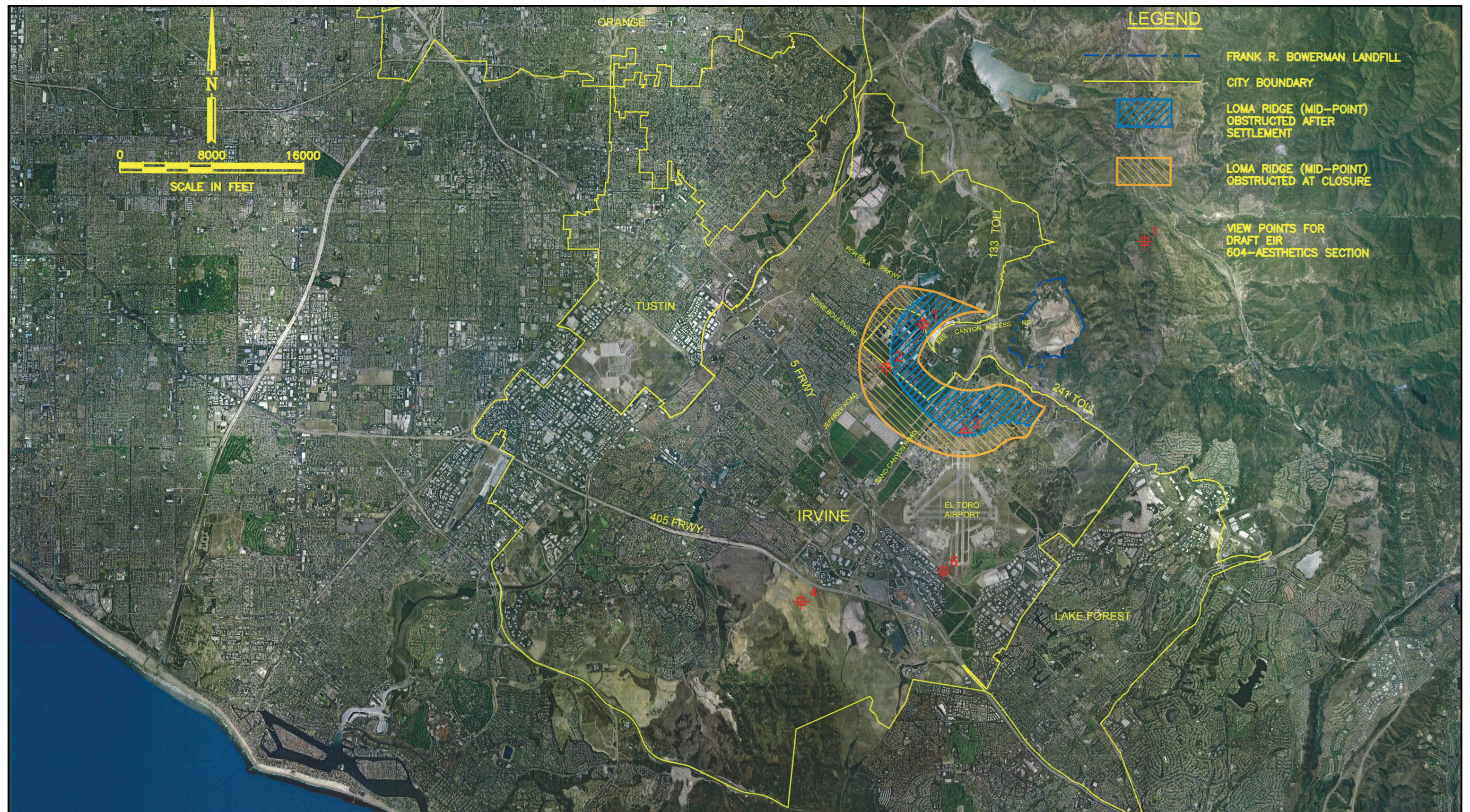


**Visual Simulation 3D-Panoramic**  
 Proposed landfill (delineated) showing settlement that occurs within five years following anticipated closure (2053) from the southeast side of Irvine Boulevard looking north-northeast.

Source: Bryan A. Stirrat & Associates (2006).

**Figure R2-4**  
**Visual Simulation 3D-Panoramic**





Source: Bryan A. Stirrat & Associates (2006).

**Figure R2-5**  
**Area of Impact - Locations from which Portions of Loma Ridge would be Obstructed**





# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • www.aqmd.gov

**FAXED: MARCH 9, 2006**

March 9, 2006

Ms. Cymantha Atkinson  
County of Orange  
Integrated Waste Management Department  
320 North Flower Street, Suite 400  
Santa Ana, CA 92703

R3

Dear Ms. Atkinson:

**Draft Environmental Impact Report (DEIR) No. 604 for the  
Frank R. Bowerman Landfill Implementation: January 2006**

The South Coast Air Quality Management District (SCAQMD) appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated in the Final Environmental Impact Report.

R3-1

Pursuant to Public Resources Code Section 21092.5, please provide the SCAQMD with written responses to all comments contained herein prior to the certification of the Final Environmental Impact Report. The SCAQMD would be happy to work with the Lead Agency to address these issues and any other questions that may arise. Please contact Charles Blankson, Ph.D., Air Quality Specialist – CEQA Section, at (909) 396-3304 if you have any questions regarding these comments.

R3-2

Sincerely

Steve Smith, Ph.D.  
Program Supervisor, CEQA Section  
Planning, Rule Development & Area Sources

Attachment

SS: CB

ORC060124-02  
Control Number

**Draft Environmental Impact Report (DEIR)  
for the Frank R. Bowerman Landfill Implementation**

1. **Project Construction Emissions:** It is unclear why the lead agency chose EPA's NONROAD model emission factors to calculate offroad construction equipment emissions since these factors were derived based on non-California diesel fuels. Further, review of the EPA document cited as providing the offroad compression ignition emission factors appears to indicate that the construction equipment emission factors are based on engine model year categories rather than fleet mixes that represent actual fleets that are expected to be used at the project site. The lead agency should identify which specific emission factors are used to calculate construction equipment emissions, explain why the NONROAD model emission factors are appropriate or recalculate construction equipment emissions using CARB's OFFROAD model emission factors, using fleet averages. One last point is that there is a large discrepancy in daily emissions listed for the 17 scrapers compared to those listed for the 33 scrapers in the tables shown in Appendix A of Appendix G of the Draft EIR.

R3-3

2. **Localized Impacts:** Consistent with the SCAQMD's environmental justice program and policies, the SCAQMD recommends that the lead agency also evaluate localized air quality impacts to nearby sensitive receptors. SCAQMD staff recommends that for this project and for future projects, the lead agency undertake the localized analysis to ensure that all feasible measures are implemented to protect the health of nearby sensitive receptors. The methodology for conducting the localized significance thresholds analysis can be found on the SCAQMD website at: [www.aqmd.gov/ceqa/handbook/LST/LST.html](http://www.aqmd.gov/ceqa/handbook/LST/LST.html).

R3-4

3. **CO Hotspots:** The Air Quality Analysis in Appendix G states that the CO hotspots analysis was completed according to the CALTRANS Transportation Project-Level Carbon Monoxide Protocol (CO Protocol), Revised December 1997, UCD-ITS-RR-97-21. However, the CO analysis appears to deviate from the CO Protocol. Figure F-3 in Appendix B of the CO Protocol illustrates how dedicated left-turn movements should be represented in CALINE4. The dedicated left-turn link endpoint should be located at the center of the adjacent turn link and extend as far back as the link representing the through movement. The left-turn link end point is located before the intersection and does not extend to the through movement link. The Final EIR should include CALINE4 modeling with left turn links represented correctly.

R3-5

The CO Protocol also states that the volume of the through movement should not include the volume of the vehicles turning left, but be included in the left turn link. By analogy, if dedicated right hand links are included, then the right-turn volumes should not be included in the through movement link. The CALINE4 modeling in the Draft EIR follows this guidance for some links for example in the northbound and southbound links representing the Sand Canyon Avenue and Irvine Boulevard intersection. However in the same run, the total approach

R3-6

	<p>volume is included in the east and westbound approach links even though the left and right turn volumes are already represented in dedicated right and left turn links. The Final EIR should include CALINE4 modeling with traffic volumes represented correctly.</p>	R3-6
	<p>The left and right dedicated turn volumes are interchanged in the Sand Canyon Avenue and Trabuco Canyon Road CALINE4 modeling. The eastbound and westbound left turn volumes are switched in the Sand Canyon Avenue and Irvine Boulevard intersection CALINE4 model runs. The CALINE4 model runs should be reviewed and the correct turn volumes should be associated with the correct links in the Final EIR.</p>	R3-7
	<p>The Draft EIR only included a CO hotspots analysis using vehicle volumes for 2030, since 2030 was closer to 2023 than 2010, and emission factors for 2030 was developed using a fleet ranging from 2000 to 2030. While the vehicle volume assumption for vehicle traffic may be appropriate, the emission factor assumptions are not appropriate. The default vehicle range in EMFAC2002 for a 2030 fleet include vehicle model years 2030 to 1985, it is not clear why the default was not used. In addition, the emission factor for the 2023 vehicle fleet should have been used. The default vehicle fleet for 2023 in EMFAC2002 ranges from 1987 to 2023. The lead agency is advised to use the default vehicle fleet or a more conservative fleet, unless it can be demonstrated that a less conservative vehicle fleet is valid and included as a mitigation measure. The Final EIR should include CO hotspots modeling with default 2023 fleet emission factors.</p>	R3-8
	<p>The Draft EIR does not describe how intersections were chosen for CO hotspots modeling. The Final EIR should include a description on how intersections were chosen for CO hotspots modeling. The SCAQMD recommends a CO hotspots modeling analysis for any intersection rated D or worse where the proposed project increases the volume to capacity ratio by two percent. Similarly, a change in LOS from C to D caused by the proposed project also warrants a CO hotspots analysis. The selected methodology should follow the CO Protocol.</p>	R3-9
4.	<p><b><u>Heath Risk Assessment:</u></b> The flares were represented as a single point source in the air dispersion model. Since ISCST3 and computers that can model the flares as individual point sources are available, SCAQMD discourages the merging of flares into a single point source. The Final EIR should include an HRA where the flares are represented as separate point sources as well as adequate documentation.</p>	R3-10
	<p>An effective of 2.46 meters was estimated for the flares, but a diameter of 0.75 meter was used in the HARP. The effective diameter of each flare should be used for the Final EIR.</p>	R3-11
	<p>Toxic air contaminants from landfill gas are evaluated in the HRA from the flares and fugitive sources. No discussion is provided on toxic air contaminants from</p>	R3-12

combustion byproducts of the flares. Only the toxic air contaminants from the pre-combusted landfill gas are discussed. The Final EIR should include a discussion of toxic air contaminants from combustion byproducts of the flares.

R3-12

5. **SCAQMD Greenwaste Management Rule:** In discussing the federal, state and district rules that the proposed project will be subject to on pages 4-12 to 4-23 of the DEIR, the lead agency fails to mention that greenwaste chipping and grinding operation is subject to SCAQMD Rule 1133.1 – Chipping and Grinding Activities. Please include a discussion of this rule if it is relevant to the proposed project and its impacts in the Final EIR.

R3-13

6. **Mitigating Operational NO<sub>x</sub> Emissions:** Though the proposed project's operational NO<sub>x</sub> and PM10 emissions exceed the significance thresholds, none of the mitigation measures described on pages 5.6-33 and 5.6-34 of the DEIR deals with these emissions. SCAQMD staff recommends the following mitigation measures for consideration by the lead agency where feasible:

- For all equipment, such as loaders, dozers, and other service equipment including front loaders, the lead agency should require the use of alternative clean fuel such as compressed natural gas-powered equipment with oxidation catalysts instead of diesel-powered engines. However, where diesel equipment has to be used because there are no practical alternatives, use oxidation catalysts and low-sulfur diesel as defined in SCAQMD Rule 431.2, i.e., diesel with sulfur content of 15 ppm by weight or less. The low-sulfur diesel has the potential to reduce NO<sub>x</sub> emissions by 50 percent.
- Require the use of aqueous or emulsified diesel fuel for all equipment. Aqueous diesel formulations have received interim verification by the CARB and show a reduction of 16 percent in NO<sub>x</sub> and 60 percent from diesel exhaust. Information on commercial availability of these products can be obtained at the following websites: [www.arb.ca.gov/fuels/ddiesel/altdiesel/altdiesel.html](http://www.arb.ca.gov/fuels/ddiesel/altdiesel/altdiesel.html), [www.lubrizol.co/PuriNox/markets\\_distributors.asp](http://www.lubrizol.co/PuriNox/markets_distributors.asp), [www.cleanfuelstech.com/Customers/Customers.htm](http://www.cleanfuelstech.com/Customers/Customers.htm).
- Require the use of newer, lower-emitting trucks from companies and cities that will be dumping materials at the site.
- Require trucks to be offloaded promptly to prevent trucks idling for longer than five minutes in compliance with state law.
- Require landfill management to train employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks within the facility.
- Require landfill management to establish specific truck routes between the center and the nearest freeway.
- Place signs at the exits of the landfill that indicate which way to turn and the specific truck route to take to get to the freeway.
- Require landfill management to provide flyers and pamphlets for truck drivers informing truck drivers of the health effects of diesel particulate and the importance of being a good neighbor.

R3-14

- Require landfill management to conduct periodic community meetings informing neighbors of steps being taken to reduce and/or eliminate diesel particulate emissions at the station.
- Install a weather monitoring station to monitor temperature, humidity, wind speed and wind direction.
- Implement a community outreach program to include a publicly displayed sign with contact information for odor complaints, a log for all odor complaints received, an employee to coordinate odor complaint response, and a protocol for handling odor complaints.

R3-14

**R3      RESPONSES TO COMMENTS FROM THE SOUTH COAST AIR QUALITY  
MANAGEMENT DISTRICT DATED MARCH 9, 2006**

- R3-1    Comment noted. No response necessary.
- R3-2    Comment noted. The IWMD will provide South Coast Air Quality Management District (SCAQMD) with written responses to their comments ten (10) days prior to certification of the Final EIR.
- R3-3    The IWMD chose the EPA's NONROAD model emission factors to calculate construction equipment emissions because this would pose a worst-case/conservative scenario. In addition, it is not specifically known what type of equipment and fuel would be used in the future. It is well-known that California diesel fuel is cleaner than the rest of the country and would emit less pollutant than the non-California fuel, hence, using NONROAD emission factors should result in higher equipment emissions estimates and would be considered a worst-case scenario. Although it appears that the construction equipment factors are based on engine model year, they are not. The NONROAD model provides emission factors according to horsepower categories and is not specific to engine model year. The engine model year data presented in the tables is to replicate the equipment currently used by the IWMD at the landfill as to minimize confusion during the estimation of emissions and to ensure approximately the same horsepower is used to estimate emissions. It was not intended to specifically identify the exact engine model year of the equipment that will be used in the future as this is currently unknown. The engine model year will be removed from the Final EIR, so it does not confuse the reader. The discrepancy in daily emissions listed for the 17 scrapers compared to those listed for the 33 scrapers is due to a typo/error in the table pertaining to the Annual numbers. The lb/day emission rates are actually the lb/hr emission rates for the annual construction emissions from the 17 scrapers and the rates should be 620.8 lb/day). This error will be corrected and revised in the Final EIR.
- R3-4    The air quality analysis was conservative and does not show any impacts above 10 in a million at any receptors. In addition, the LST method typically only applies to project less than five acres. As stated in *Appendix C - Mass Rate LST Look-up Table*, "The mass rate look-up tables were developed for each source receptor area (SRA) and can be used on a voluntary basis by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts. The LST mass rate look-up tables only apply to projects that are less than or equal to five acres." Therefore, this method does not apply since the proposed project is much larger.
- R3-5    Comment noted. The IWMD concurs with SCAQMD comment and the CO hotspots analysis will be reanalyzed. These changes will be reflected in the Final EIR.
- R3-6    Comment noted. The IWMD concurs with SCAQMD comment and the CO hotspots analysis will be reanalyzed. These changes will be reflected in the Final EIR.

- R3-7 Comment noted. The IWMD concurs with SCAQMD comment and the CO hotspots analysis will be reanalyzed. These changes will be reflected in the Final EIR.
- R3-8 Comment noted. The IWMD concurs with SCAQMD comment and the CO hotspots analysis will be reanalyzed using the 2030 default fleet mix and traffic data for year 2030. These modified results will be presented in the Final EIR.
- R3-9 The intersections were chosen based on the worst level-of-service among all intersections potentially affected by the proposed project. The Final EIR will include a description on how the intersections were chosen for CO hotspots modeling.
- R3-10 Since the flare exhaust stacks are all located at a centralized location, it was modeled as one single stack using the merged stacks method recommended by the United States Environmental Protection Agency (EPA). The EPA method provides dispersion modeling guidance such as exhaust release parameters and emission rates when merging stacks that are located near each other. This method is considered to be conservative (i.e., worst-case scenario) in terms of the predicted impacts associated with flare emissions. Therefore, modeling the flares as a single source would not be necessary if the worse case scenario (merged flare stack model) concluded that no significant impacts would occur.
- R3-11 Comment noted. This is a typo/error in the model input (2.46 feet equals 0.75 meters). It should be noted that exhaust plume rise and dispersion are based on exhaust flow rate and stack diameter. Using a smaller exhaust diameter would result in localized impact. The concentrations would be higher at nearby receptors and is considered more conservative. This error will be corrected and revised results will be presented in the Final EIR.
- R3-12 It was presumed that the toxic air contaminants from combustion byproducts of the flares are integrated into the destruction efficiency of the flares during combustion of landfill gas. Therefore, only the criteria pollutants (i.e., NO<sub>x</sub>, CO, etc.) from combustion byproducts are discussed in the DEIR.
- R3-13 There are no green waste/wood chipping and grinding operations at the FRB Landfill.
- R3-14 The IWMD has considered the suggested mitigation measures and will implement an addition mitigation measure (AQ-3) in the Final EIR to reduce facility emissions during project operations. In addition, IWMD will continue to comply with SCAQMD mandatory regulations and requirements for Class III landfills in the South Coast Air Basin.
- AQ-3 Implementation of the following measures will help reduce NO<sub>x</sub> and PM<sub>10</sub> emissions during operational activities:
- The IWMD shall purchase four, single engine, articulating dump trucks in fiscal year 2006/2007 to replace four, twin engine scrapers. The trucks will

meet United States EPA Tier 3 emissions standards. In addition, IWMD will purchase one excavator.

- The IWMD shall routinely train employees in efficient scheduling and load management to eliminate unnecessary queue and idling of trucks with the landfill.
- Continue to be proactive in notifying truck drivers of the designated truck route.
- Make sure signage at the exit of the landfill indicating the turn direction to follow the designated truck route to the freeway is visible to all truck drivers.
- Continue to monitor wind speed and direction through the landfill's on-site weather station.





**COUNTY OF ORANGE  
HEALTH CARE AGENCY**

**REGULATORY HEALTH SERVICES  
ENVIRONMENTAL HEALTH**



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March 9, 2006

R4

Cymantha Atkinson, Project Manager  
Office of Public Affairs  
County of Orange IWMMD  
320 North Flower Street, Suite 400  
Santa Ana, CA 92703

**Subject: DEIR 604 (SCH No. 2005071102) - Regional Landfill Options for Orange County  
Strategic Plan - Frank R. Bowerman Landfill Implementation, SWIS No. 30-AB-0360,  
Irvine**

Dear Ms. Atkinson:

On January 20, 2006, the Solid Waste Local Enforcement Agency (LEA) received Draft EIR No. 604 (DEIR) - SCH No. 2005071102 - for RELOOC Strategic Plan - Frank R. Bowerman Landfill Implementation. Orange County Integrated Waste Management Department (OCIWMD) is the Lead Agency who prepared this CEQA document to analyze the impacts of continued operations at FRB Landfill through 2053. FRB Landfill is currently permitted to operate through 2022. The proposed project also calls for the following major design and operational changes: a) expansion of the waste-fill area by an additional 193 acres within existing permitted boundaries for a new total waste-fill area of 534 acres, b) increase the maximum waste-fill height by 250 ft for a new elevation of 1,350 ft AMSL, c) increase air space capacity by an additional 130 MCY for a new total of 257 MCY, and d) increase permitted maximum daily tonnage to 11,500 TPD.

R4-1

The above listed changes were derived from the updated Master Development Plan (MDP) for FRB Landfill dated November 2004. The MDP was revised primarily as a result of a major landslide in northern parts of FRB Landfill which has decreased the overall airspace capacity by over 40 MCY.

R4-2

As a Responsible Agency, the LEA has reviewed the DEIR and has the following comments:

R4-3

1. The updated MDP clearly show a soil shortage (estimated at 900,000 cy/year for daily operations) that FRB Landfill will experience sometime during development Phase IX. To address this issue, the updated MDP recommends, among others, implementing a program to accept/import soil at the site as early as Phase VIIIA, but certainly no later than Phase IX. Such a program will invariably have impact(s) on the environment (e.g. daily operations at the landfill, traffic, noise, air quality, etc.). Has this DEIR accounted for soil importation program and analyzed its potential impact(s)?

R4-4

2. Section 1.1.4.4, page 1-6: The proposed project calls for waste tonnage increase of over 35% from the currently permitted 8,500 TPD (for 271 days per year), and over 8% from the currently permitted 10,62500 TPD (for 36 days per year) to 11,500 TPD for 307 days per year. Consequently, the LEA is concerned about OCIWMD's ability, as an operator, to comply with State Minimum Standards under the proposed tonnage conditions. This section states *"an increase in personnel by seven employees and, in equipment use, by up to six pieces of equipment was assumed for a continuous operation at 11,500 TPD"*. Table 10-2 of this DEIR, however, lists the additional equipment needed under the proposed project as 1 trash tractor and 1 trash compactor operating full time (i.e. 10 hours per day), and 1 scraper operating part time (i.e. 5 hours per day). Either way, it seems the numbers for additional employees and heavy equipment required under the proposed project were established randomly with no detailed basis or rational provided. In commenting on the Initial Study/Environmental Analysis Checklist (please see our August 22, 2005, letter), the LEA had clearly explained the level of details needed to adequately address this issue. DEIR No. 604 does not provide adequate discussion/analysis to alleviate LEA's concerns about OCIWMD's ability to continue complying with State Minimum Standards under the proposed significant waste tonnage increase conditions. R4-5
3. Section 4.3.2, bullet 1, page 4-4: *"An increase in refuse density is also proposed to maximize capacity due to use of better compaction equipment"*. Also, section 4.4.5, page 4-19 states *"As part of the RELOOC study, more efficient compaction equipment was proposed for the FRB Landfill as a means of maximizing capacity"*. To this end and throughout the DEIR and updated MDP, refuse density was assumed to be 1,450 lb/cy. The existing Joint Technical Document for FRB Landfill, however, shows a refuse density of 1,333 lb/cy. Since in-place refuse density is a major factor, among others, in calculating remaining site capacity and ultimately closure date, the LEA has questions regarding this change. This CEQA document needs to further elaborate on the improved compaction equipment. What type of refuse compaction equipment have been (or will be) procured for this purpose and how will these equipment increase the density of buried waste? If these equipment have already been employed, has there been any field testing/pilot study to verify the higher refuse density value of 1,450 lb/cy? LEA's letter dated August 22, 2005, alluded to this issue. R4-6
4. Section 4.4.2, page 4-17: *"Approximately 900 TPD (average for 307 days) of exempt waste (asphalt, demolition, dirt, green waste and shredder waste) was accepted at the site in 2004"*. The DEIR is silent on whether this tonnage of exempt materials is expected to increase, decrease, or stay basically unchanged in the future. Further, this CEQA document should account for and analyze the impacts of accepting such a sizable amount of exempt materials in addition to the proposed 11,500 TPD of buried waste tonnage, as was clearly have stated in our comments letter dated August 22, 2005 on the Initial Study/Environmental Analysis Checklist. This sizable amount of exempt materials will invariably impact site daily operations, site capacity, traffic, noise, air quality, etc. R4-7
5. Section 4.5.2.4, page 4-32: *"In addition, the use of LFG for energy production is currently being conducted at the Olinda Alpha and Prima Deshecha landfills and a pilot program for the conversion of LFG to liquefied natural gas is in the development stages for the FRB Landfill"*. The LEA understands that the pilot LFG to liquefied natural gas (LFG-to-LNG) project is planned for implementation at FRB Landfill this year. Has the DEIR accounted for and analyzed the impacts of a full scale LFG-to-LNG plant operating on-site (assuming the results of the pilot project are favorable)? Such a plant will invariably have an impact on air quality, hazards/risk of upset, noise, traffic, etc. R4-8

6. Section 5.5.3.1, page 5.5-7: *"It is assumed that the truck type percentage splits and truck trip distributions for future conditions will remain the same as existing conditions"*. In light of comment Nos. 1, 4 and 5 above, the LEA questions the validity of this assumption. R4-9
7. Section 5.5.3.4, pages 5.5-9 and 5.5-10: Ultimately, the basis for estimating the No. of daily truck trips corresponding to 11,500 TPD was data for the 85<sup>th</sup> percentile day in 2004. Why was the 85<sup>th</sup> percentile day in 2004 selected as a starting point in the calculations? Further, it is unclear if this approach has accounted for all the above listed truck traffic hauling materials, products, etc. in addition to traffic of waste-hauling trucks and site personnel. R4-10

We look forward to cooperatively working with OCIWMD to ensure a successful completion of this process and ultimately revising FRB's Solid Waste Facility Permit to reflect the changes proposed. If you have any questions, please contact me at (714) 433 - 6271. R4-11

Sincerely,



Ossama "Sam" Abu-Shaban, PE, DEE  
Senior Civil Engineer  
Solid Waste Local Enforcement Agency  
Environmental Health

cc: Raymond Seamans, CIWMB

**R4 RESPONSES TO COMMENTS FROM THE COUNTY OF ORANGE HEALTH CARE AGENCY DATED MARCH 9, 2006**

R4-1 Comment noted. No response necessary.

R4-2 Comment noted. No response necessary.

R4-3 Comment noted. No response necessary.

R4-4 The IWMD plans to address the projected soil shortage at the site by increasing the waste-to-soil ratio, utilizing more efficient new ADCs (as they become available), accepting soil free of charge when sufficient area for stockpiling becomes available and/or by importing soil prior to the projected shortfall (currently projected by 2041). Soil availability and demand will be monitored by the IWMD and, if necessary, a soil importation program will be developed and analyzed for CEQA compliance closer to the time a shortage is anticipated. The status of soil availability will be reported during every 5-Year Solid Waste Facility Permit Review for the site.

R4-5 The proposed project is to maintain the currently permitted 8,500 tpd refuse inflow rate as an annual average. A peak refuse inflow rate of 11,500 tpd is proposed for high tonnage days similar to the currently permitted 10,625 tpd high tonnage limit. IWMD is able to maintain compliance with State Minimum Standards under the currently permitted 8,500 tpd annual average and the 10,625 tpd high tonnage levels of operation with existing on-site equipment. An increase of 8 percent for the periodic high tonnage level of 11,500 tpd can be handled with existing on-site equipment. However, for purposes of a worst case environmental impact analysis in EIR 604, estimates were developed for a continuous operation of 11,500 tpd. The traffic analysis assumed an increase in personnel of seven persons and the Air Quality/Energy analyses assumed an additional three pieces of equipment for a continuous 11,500 tpd worst case operation. Sections 1.1.4.4 and 4.3.6 will be changed from referencing “up to six pieces of equipment” to “three pieces of equipment.”

The first paragraph under Section 1.1.4.4 (Other Project Features) on page 1-6 of the DEIR is corrected by reference to read:

“The project may require that additional buildings and structures be constructed at the FRB Landfill and will require relocation of existing entrance facilities, scales/scale house, LFG control facilities and other landfill support facilities in a later phase of development (Phase X to begin filling operations in approximately 2041). The number of employees and equipment at the landfill is not expected to change substantially as a result of the proposed project. However, for purposes of environmental impact analysis, an increase in personnel by seven employees and, in equipment use, by three pieces of equipment was assumed for a continuous operation at 11,500 TPD. The proposed project is to accept 11,500 TPD on a periodic basis to accommodate high tonnage days and to maintain an annual average of 8,500 TPD. Employees would continue to perform landfill

operations including administration, landfill cover operations and other landfill related operations. As part of the proposed project environmental analysis, an evaluation was made of changing the landfill operating hours from 7:00 A.M. - 5:00 P.M. to 6:00 A.M. - 4:00 P.M. in the event IWMD proposes that change in hours in the future. Appropriate approvals for a change in operating hours will be pursued at that time. The landfill will continue to operate six days per week, Monday through Saturday, and will be closed on the six major holidays.”

The first paragraph under Section 4.3.4 (Other Project Features) on page 4-15 of the DEIR is corrected by reference to read:

“The project may require that additional buildings and structures be constructed at the FRB Landfill and will require relocation of existing entrance facilities, scales/scale house, LFG control facilities and other landfill support facilities in a later phase of development (Phase X to begin filling operations in approximately 2041). The number of employees and equipment at the landfill is not expected to change substantially as a result of the proposed project. However, for purposes of environmental impact analysis, an increase in personnel by seven employees and, in equipment use, by three pieces of equipment was assumed for a continuous operation at 11,500 TPD. The proposed project is to accept 11,500 TPD on a periodic basis to accommodate high tonnage days and to maintain an annual average of 8,500 TPD. Employees would continue to perform landfill operations including administration, landfill cover operations and other landfill related operations. The operating hours and schedule at the FRB Landfill may change in the future as a result of the proposed project. IWMD is considering changing the hours of operation at the landfill from 7:00 A.M. to 5:00 P.M. to 6:00 A.M. to 4:00 P.M. in the event IWMD proposes this change in future operating hours, appropriate approvals will be pursued at that time. The site would continue operating six days a week, except for holidays (307 days a year).”

R4-6 The RELOOC study (Reference: RELOOC Feasibility Study Report, Appendix E, December, 2001) evaluated the use of heavier compaction equipment to increase refuse density (836 compactors vs. 826 compactors). An increase of 8.7 percent was estimated for the replacement of 826 compactors with 836 compactors at the FRB Landfill in 1999 due to increased power, higher speeds and/or better concentration of compacting stress. This increase in compaction due to the heavier compaction equipment would result in an increase from 1,333 lb/cy to 1,450 lb/cy refuse density. In addition, the recent use of a Computer Assisted Earthmoving System (CAES) computer in each trash compactor reduces voids in the landfill cells as a means of increasing refuse density. A higher refuse density is also expected with a deeper refuse fill (which would not be reflected in a field test of a newly developed cell). The JTD and other operating documents for the FRB Landfill will be revised to consistently reflect a 1,450 lb/cy refuse density.

R4-7 The traffic and associated air quality and noise analysis for the EIR considered impacts of an increase in existing (calendar year 2004) truck traffic due to an increase in high tonnage for general MSW and assumed that non-MSW exempt material would remain the

same, as discussed in Section 5.5.3.4 of the DEIR. See Response to Comment No. R4-10 for the baseline (2004) traffic condition assumptions.

Although the 2004 annual average 900 tpd of exempt waste is not expected to increase, the daily rate fluctuates from day to day. As stated in Response to Comment No. R4-10, the DEIR traffic analysis assumed truck trips (in 2004) for non-MSW exempt material on the 85<sup>th</sup> percentile day (152 daily truck trips) which corresponded to approximately 1,475 tpd of non-MSW exempt material.

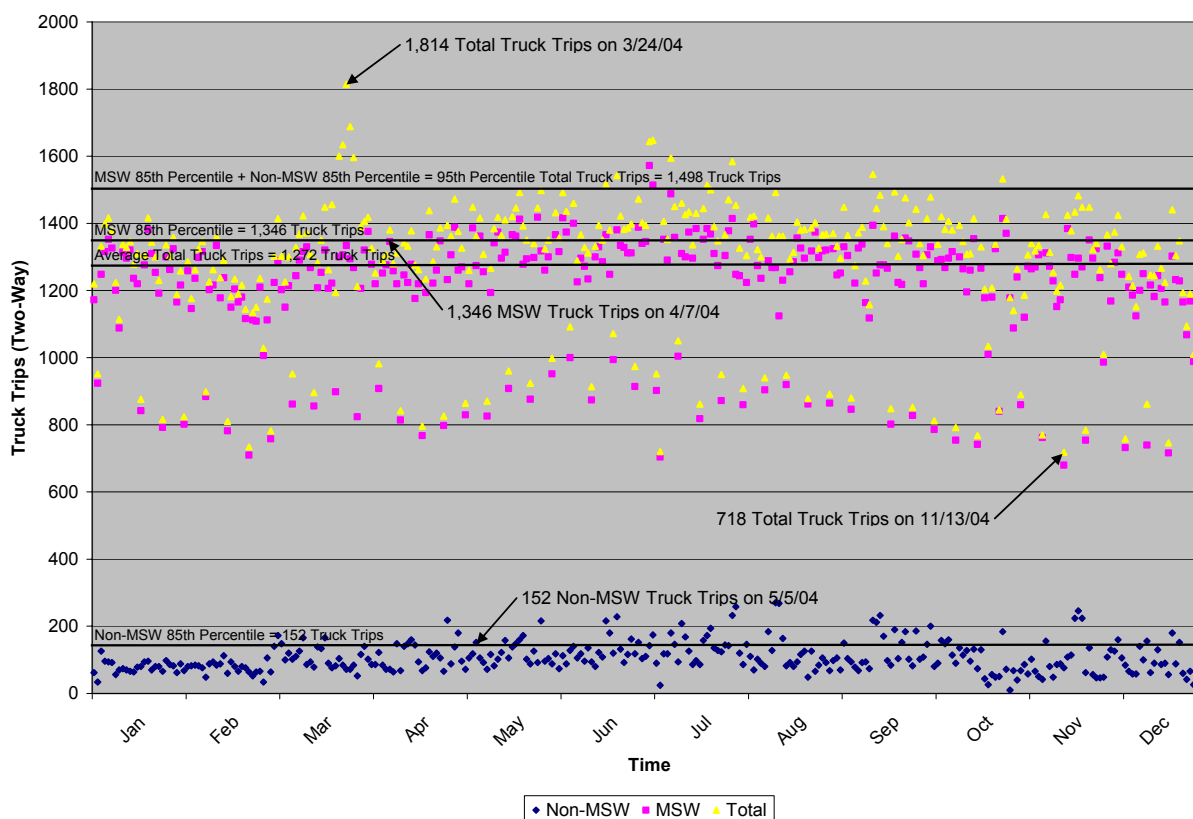
The future traffic generation of 1,053 one-way truck trips analyzed in the DEIR (see Section 5.5.3.4) for the proposed project would support 12,975 tpd of total materials brought to the site (11,500 tpd of general MSW and 1,475 tpd of non-MSW exempt material). The amount of general MSW and non-MSW exempt material varies from day to day but is not projected to exceed a total amount of 12,975 tpd for the expansion project. The second paragraph in Section 4.4.2, page 4-17 of the Draft EIR, will be revised by reference to read:

“It should be noted that the 8,500 TPD inflow rate is for MSW only. Approximately 900 tpd (annual average for 307 days) of exempt waste (asphalt, processed green material, and soil) was accepted at the site in 2004 which rate fluctuates from day to day. For the proposed expansion project, the traffic, air and noise analysis evaluated impacts due to truck trips supporting a total of 12,975 tpd of total materials (general MSW and non-MSW exempt material) brought to the site on a given day. The amount of general MSW and non-MSW exempt material will fluctuate on a daily basis but is not projected to exceed a total amount of 12,975 tpd. This would allow for 1,475 tpd of exempt material at the MSW peak rate of 11,500 tpd and up to 4,475 tpd at the MSW annual average rate of 8,500 tpd.”

- R4-8 IWMD prepared a Mitigated Negative Declaration (MND) for the proposed FRB LNG Facility. This MND analyzed the potentially significant environmental impacts associated with the full buildout and long-term operation of a proposed LNG facility at the FRB Landfill. The MND also included mitigation measures to reduce these potentially significant environmental impacts to a less than significant level. The LEA reviewed the MND during the mandatory 30-day public review period. The MND was approved by the IWMD Director on August 10, 2004.
- R4-9 There are no changes to existing operations proposed in the project that would affect the truck type percentage splits or truck trip distribution for the site.
- R4-10 The chart below shows the FRB Landfill truck statistics for year 2004. As shown in the chart, the existing landfill trip generation varied throughout the year 2004 from a low of 718 truck trips to a high of 1,814 truck trips. The average truck trips at the landfill in 2004 were 1,272 truck trips. Because the daily truck trips for the MSW and non-MSW exempt materials varied independently, the truck trips for the 85<sup>th</sup> percentile day for MSW and the 85<sup>th</sup> percentile day for non-MSW exempt materials were combined together and used in the traffic analysis. This combination of truck trips represented the

95<sup>th</sup> percentile of all combined truck trips at the landfill in 2004. As discussed in Section 5.5.3.4 of the DEIR, the landfill in 2004 generated 1,346 daily truck trips for MSW on the 85<sup>th</sup> percentile day and 152 daily truck trips for non-MSW exempt materials on the 85<sup>th</sup> percentile day for a total of 1,498 daily truck trips. For 95 percent of the days in 2004, the landfill generated less than 1,498 daily truck trips. For five percent of the days in 2004, the landfill generated 1,498 or more daily truck trips.

#### FRB LANDFILL TRUCK STATISTICS – 2004



R4-11 Comment noted. No response necessary.







# North Irvine Villages Association

Ms. Cymantha Atkinson  
County of Orange,  
Integrated Waste Management Department  
320 North Flower Street, Suite 400  
Santa Ana, CA 92703

March 3, 2006

B1

Re.: Draft Environmental Impact Report No. 604  
Regional Landfill Options For Orange County Strategic Plan -  
Frank B. Bowerman Landfill Implementation

Dear Ms. Atkinson:

NIVA appreciates the receipt of a copy of the Draft EIR No. 604 [Report] on the Bowerman Landfill Implementation Project [Project] and the opportunity to comment on same. NIVA is an association representing 19 individual homeowner associations located in North Irvine. As such, it has a keen interest in this proposed project.

B1-1

1. One of the most significant and fundamental differences we note with regards to the appropriateness of the analysis contained in the report is that of whether the Project ought to be presented as simply an **expansion** of the current permitted operation or an **extension** of the same. The result would be significantly different in certain of the elements depending on the assumed starting point or basis for comparison to assess increases in impacts. As we perceive the Project, it is an extension since the current operation has a specific permitted operation beyond which no further landfill operation can occur. Upon attainment of that level, landfill operation would cease. Consequently, the situation after cessation of operation would be that there would be no traffic, noise, and possibly other impacts, generated by landfill operation. It would, therefore, be appropriate to treat the expansion as a startup of a new operation and comparisons to be made with no existing landfill operation. This is what the community previously and currently expects from the previously approved landfill operation, that is, that there will be no further impacts experienced by the neighborhood from vehicles going through their community to reach the Landfill once the permitted operational period has expired.

B1-2

Therefore, the following comments are in keeping with this understanding.

B1-3

## Transportation and Circulation Element

2. The findings detailed in the Report are that the Project will not cause significant off-site impacts from increased project-related traffic including heavy trucks. The key word is "increased". As mentioned in the introduction of this letter, the comparison should rightly be made between the proposed extended operation and no operation. With such a comparison, would the traffic impacts remain less than significant? It is doubtful and most likely additional mitigation measures would be required beyond the 2 relatively minor measures proposed in the Report. The use of a comparison as done in the study detailed in the Report serves to mask the true impact.

B1-4

3. It was noted that traffic vehicle counts were made on only one day and that day was Wednesday, September 14, 2005. It would seem appropriate to do counts over several days to arrive at an average more assuring of an accurate representative number.

B1-5

4. The Report indicates that 100 heavy (aka transfer) trucks a day are currently using Jeffrey Road to access the Landfill from the I-5 Freeway and that the number is projected to

B1-6

increase to 800 heavy trucks a day in Year 2030. At the same time, the Report states that approximately 50% of all vehicles accessing the Landfill use Jeffrey Road. It is our understanding that per Article C.3 of the Settlement Agreement between the County and City of Irvine, that trucks accessing the Landfill from the I-5 Freeway are supposed to be using Sand Canyon. One of the purposes of the Agreement was to mitigate anticipated truck traffic impacts on the residential neighborhood between the Landfill and the I-5 Freeway. Does this mean the previous Settlement Agreement is not, and will not be expected to be, adhered to or enforced by the County? Is the future traffic projections with the Project premised on the same disregard for the Agreement or lack of an extension of a similar agreement? Or will the Agreement remain but simply not be enforced? If enforced, what do these traffic volumes on Jeffrey Road represent?

B1-6

5. Per Section 5.5.3.5, *Proposed Project Trip Distribution*, transfer trucks must use Sand Canyon to traverse between the I-5 Freeway and the Landfill, but all other trucks (i.e., packer and self-haul trucks) are permitted to use alternative routes to the Landfill including Jeffrey Road. This is not in compliance with the Settlement Agreement. Per Article C.3 which stipulates this condition, there is no distinction made between truck types. It may be reasonable, however, to allow packer and self-haul trucks originating from the immediate area such as North Irvine, Lake Forest, and Tustin to use alternative routes including Jeffrey Road. However, the percentages stated in this section of the Report appear extremely high if representative of only these local trips. But for others, it is unnecessary and not in compliance with the intent or wording of the Settlement Agreement. A traffic study based on such a proviso is, therefore, invalid unless, of course, the County has no intention of complying with or enforcing the agreed upon provision of the Agreement.

B1-7

6. One of the traffic improvements proposed as a mitigation measure is that of the application of ATMS to the Sand Canyon/Trabuco intersection [T-1]. For ATMS to have any chance of working, a series of roadway intersections on either Trabuco or Sand Canyon have to be simultaneously activated with ATMS. As an isolated application of ATMS, the measure would fail to provide any traffic congestion relief. So how is this proposal anticipated to be a part of a bigger picture, i.e., what other intersections on Trabuco or Sand Canyon are planned to be improved with ATMS by the County or City and coordinated with this proposed ATMS mitigation application?

B1-8

7. Another proposed traffic mitigation measure [T-2] is that of providing a westbound right-turn lane on Walnut Avenue with a protected right-turn phase that is overlapped with the southbound Jeffrey Road left-turn phase in the Year 2030. This proposal implies and again highlights the traffic volume anticipated on Jeffrey Road for accessing the Landfill -- traffic that should not be occurring if the County/City Settlement Agreement were adhered to and enforced.

B1-9

8. The proposed operation of the Landfill is to start an hour earlier, i.e., 6 a.m. That means truck traffic to the site will commence one hour earlier going across Irvine streets prior to 6 a.m. This is objectionable and does not appear to be warranted or considerate of the neighborhood through which the trucks travel.

B1-10

#### Noise Element

9. The findings detailed in the Report are that the proposed project will not cause significant noise on- or off-site. However, as mentioned in the introduction of this letter, this conclusion was based on the premise that the Project represents simply an expansion of

B1-11

the Landfill and not the more accurate description of the action as an extension of operation. With the latter, the noise increase derived from a comparison of the extended operation and corresponding trash truck traffic through the neighborhood with that of no Landfill operation, i.e., no trash truck traffic, would most likely be significant. Currently, the neighboring residents can anticipate relief from the on-going truck traffic off-site noise beyond Year 2022 when the existing permit expires. With the proposed Project, this anticipated relief will be postponed 30+ years (in essence, lost to those residents of this generation).

B1-11

#### Aesthetics Element

10. The OCWMD proposes within the Project to take measures to contain all glare and direct rays of lighting to the Landfill site. However, no specific site is specified for the relocated flare station but rather that its determination is postponed to a time closer to its implementation. Though practicality may warrant the postponement of the site selection, a commitment to environmental impact mitigation measure(s) can and should be identified and listed at this time. The concern is not simply with glare from any flame but the flickering glow against the adjacent hillsides should it burn during evening hours. This facility could contribute significantly to light pollution in the otherwise pristine hillside horizon. It should have been analyzed for this Report. Consequently, any eventually-selected site must not be visible from any location in North Irvine nor should any operation of the flare be permitted at night.

B1-12

11. In 1988, the residents of Irvine, through the approval of an Open Space initiative, decided that the retention of the open space in the adjacent foothills was of paramount importance. Simultaneously, when the Bowerman Landfill (aka Bee Canyon) was originally planned, the need to screen the Landfill operation from the view of the neighboring residential communities was considered extremely important. In response, the County planned a relatively stealth operation. The unobstructed and unmarred vistas of the Loma Ridge and Santiago Hills were retained and assured. As stated in Article B.5 of the Settlement Agreement, the "...County will not permit the Bee Canyon landfill operation to be visible from the surrounding area". And again in Article B.6.b, the "...County will require that the final fill face of the Bee Canyon landfill be contour cut to blend in with the surrounding topography, as practical."

B1-13

The computer-generated visual simulations of the hillsides in Figures 5.9-4 of the Report depict views of the final fill face of the proposed expanded landfill upon completion. Not only do these pictures illustrate various views of what is equivalent to a large earthen dam (with homogenous frontage and a level horizontal top) but the landfill would now forever obscure views of the natural ridgeline.

B1-14

The visual impacts are significant and remain significant as no meaningful mitigation measure is proposed. The proposed change to the view of natural beauty of the hills and ridgeline are objectionable and not in keeping with the intentions and goal set at the time of the outset of the Bowerman Landfill. We suggest that all practical means be considered and proposed which will reduce the level of observation or perception of the landfill and incorporate a more nature look to the final landfill frontage. Simple seeding with CSS species may not be sufficient to blend the landfill with the adjacent undeveloped hills.

B1-15

We would also suggest exploring the possibility of (1) creating a hillside frontage which is more natural with varying slope and a top ridgeline of varying height more similar to the hills

B1-16

March 3, 2006

themselves, (2) installing a varied and more natural appearing vegetation including randomly-placed trees and shrubs, and (3) hiding from visibility the horizontal and vertical water channels on the fill face which otherwise are assumed will be similar to those seen in the existing view in Figure 5.9-3.

B1-16

General Comments

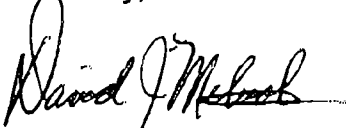
12. In the text of the description of the surroundings and in Figure 5.9-1, it is mentioned and indicated that the area to the west is only in the City of Irvine Sphere of Influence and currently agriculture. To the contrary, it has been rezoned to residential and annexed to the City with construction already underway. Therefore, the closest existing and planned residential uses are in the City of Irvine not only south, and southwest of the Landfill but also to the west.

B1-17

In conclusion, we understand the need for the expansion and corresponding extension of operation to the Bowerman Landfill and the value of this Project to the overall OCWMD RELOOC Strategic Plan. However, regardless of the need, the Project should not be approved as proposed. Significant modification and adequate/acceptable changes to the proposed mitigation measure program are needed so as to eliminate or minimize the serious impacts pertaining to noise, traffic, and aesthetics as discussed herein. We are confident that the traffic and noise impacts would be shown to be "significant" if the comparison analyses were made between the proposed extension of the landfill operation with that of a ceased operation as currently permitted. We also find it objectionable to assess the consequent traffic conditions based on continued violation of the terms of the Settlement Agreement and to consider an operational start time one hour earlier than current permitted. Should you need to contact me, I can be reached on (714) 669-0664.

B1-18

Sincerely,



David Melvold  
President

**B1     RESPONSES TO COMMENTS FROM THE NORTH IRVINE VILLAGES ASSOCIATION DATED MARCH 3, 2006**

B1-1    Comments noted. No response necessary.

B1-2    It should be noted that the vertical and horizontal expansion of the FRB Landfill would be implemented in phases and would extend the life of the landfill from its currently permitted closure date of 2022 to approximately 2053. As stated in Section 1.1.1 (Purpose of the Proposed Project) on page 1-1 of the DEIR, “This environmental impact report (EIR) analyzes the potential environmental impacts associated with the continued operation of the FRB Landfill until closure, estimated to occur in the year 2053.” CEQA analysis is based on comparison to a baseline which is the existing condition, in this case, an operating landfill. There is no requirement to assume the absence of the existing project.

B1-3    Comment noted. Refer to response to comment B1-4 to B1-18, below.

B1-4    As stated in comment B1-4, “the comparison should rightly be made between the proposed extended operation and no operation” to determine the significant adverse impacts created by implementation of the proposed project. However, in accordance with the CEQA guidelines, the traffic analysis in the DEIR identified the significant adverse traffic impacts created from implementation of the proposed project by comparing the proposed project conditions to the no project conditions. The traffic analysis studied the traffic conditions for years 2010 and 2030.

In year 2010, the no project condition was the continuation of the existing landfill permits until the permitted closure date of 2022. The existing landfill permits would allow the landfill to accept the daily maximum of 10,625 TPD of MSW while maintaining an annual average of 8,500 TPD of MSW. The proposed project for year 2010 was the increase of the daily maximum acceptance of MSW to 11,500 TPD over the permitted 10,625 TPD, while maintaining an annual average of 8,500 TPD. Therefore, as discussed in Section 5.5.3.4 of the DEIR, the proposed project in 2010 would generate an additional 346 daily PCE trips because of the increase of the daily maximum acceptance of MSW from 10,625 TPD to 11,500 TPD. The traffic analysis for the DEIR analyzed the traffic impacts of the 346 daily PCE trips for year 2010. As discussed in Section 5.5.4.1 of the DEIR, the implementation of the proposed project would create no significant adverse traffic impacts for year 2010.

In year 2030, the no project condition assumed that no landfill operations would exist because the landfill would be closed in 2022. The proposed project for year 2030 was to permit the landfill to accept the daily maximum of 11,500 TPD of MSW, while maintaining an annual average of 8,500 TPD, to the approximate closure date in 2053. As discussed in Section 5.5.3.4 of the DEIR, the proposed project would generate 4,911 daily PCE trips for year 2030. The traffic analysis for the DEIR analyzed the traffic impacts of the 4,911 daily PCE trips for year 2030. As discussed in Section 5.5.4.2 of the

DEIR, the traffic analysis for year 2030 identified two significant adverse traffic impacts which would be created by implementation of the proposed project. The significant adverse traffic impacts would occur at the intersection of Sand Canyon Avenue at Trabuco Road and at the intersection of Jeffrey Road at Walnut Avenue. However, Mitigation Measures T-1 and T-2 listed in Section 5.5.5 of the DEIR would reduce the two significant adverse traffic impacts to a level of insignificance.

- B1-5 The traffic counts collected on Wednesday, September 14, 2005, were reviewed prior to use in the traffic analysis, and the traffic counts did not indicate any anomalies.

As discussed in Section 5.5.1.4, all study road segments and intersections were operating at LOS A for existing conditions except for the intersection of SR 133 northbound ramps at Irvine Boulevard during the A.M. peak hour, which operated at LOS C. This intersection operated at LOS C because of construction on Irvine Boulevard reducing the intersection capacity. The road segments and intersections operating at LOS A indicate that the road segments and intersections experience low traffic volumes in relation to the capacity. Therefore, the additional traffic counts would not generate large fluctuations in traffic volumes such that the road segment or intersection would operate at unacceptable LOS E or F.

- B1-6 Comment noted. Refer to response to comment R2-33 for the clarification regarding the waste hauling truck distributions percentages on Jeffrey Road and Sand Canyon Avenue.

IWMD plans to negotiate a mutually acceptable agreement with Irvine that will guide the relationship between the City and the department. The existing Settlement Agreement was entered into by the City and the County to resolve former litigation, and it is not necessarily the appropriate legal mechanism to memorialize future terms and conditions. IWMD intends to work towards consensus on an agreement that will guide the relationship of IWMD and the City, and address the City's interests regarding the expansion of the FRB Landfill. While the mitigation measures set forth in the EIR fully address the project's identified impacts, the agreement has the ability to provide for additional responses to the City's concerns in a mutually acceptable manner.

In addition, as discussed in Section 5.5.3.5 of the DEIR, most of the transfer trucks traversed on the designated truck route to the landfill based on field observations. The designated truck route to the landfill are I-5, I-405, Sand Canyon Avenue, Portola Parkway, and Bee Canyon Access Road as established in the Settlement Agreement between Orange County and the City of Irvine. It should be noted that the County lacks authority for traffic enforcement in this area. However, IWMD has been and will continue to be proactive in identifying the designated truck route to truck drivers entering and leaving the landfill.

Based on the existing truck distribution, approximately 24 additional waste hauling truck trips will traverse on Jeffrey Road in 2010. After applying a 2.24 PCE factor to the waste hauling truck trips and adding the six additional employee trips, a total of 59 [= 24 x 2.24 + 6] PCE trips will traverse on Jeffrey Road in 2010. In comparison,

approximately 79 additional waste hauling truck trips will traverse on Sand Canyon Avenue in 2010. After applying a 2.24 PCE factor to the waste hauling truck trips and adding the four additional employee trips, a total 181 [= 79 x 2.24 + 4] PCE trips will traverse on Sand Canyon Avenue in 2010. It should be noted that these 59 PCE trips on Jeffrey Road and 180 PCE trips on Sand Canyon Avenue was rounded to the nearest hundreds on Figure 5.5-3 of the DEIR.

Based on the existing truck distribution, approximately 316 waste hauling truck trips will traverse on Jeffrey Road in 2030. After applying a 2.24 PCE factor to the waste hauling truck trips and adding the 87 employee trips, a total of 795 [= 316 x 2.24 + 87] PCE trips will traverse on Jeffrey Road in 2030. In comparison, approximately 1,053 waste hauling truck trips will traverse on Sand Canyon Avenue in 2030. After applying a 2.24 PCE factor to the waste hauling truck trips and adding the 50 employee trips, a total of 2,408 [= 1,053 x 2.24 + 50] PCE trips will traverse on Sand Canyon Avenue in 2030. It should be noted that these 795 PCE trips on Jeffrey Road and 2,408 PCE trips on Sand Canyon Avenue was rounded to the nearest hundreds on Figure 5.5-4 of the DEIR.

B1-7 Comment noted. Refer to response to comment B1-6, above.

B1-8 The ATMS strategies apply the latest traffic control systems to improve traffic flow through the intersection. These traffic control systems include the use of interconnect, closed circuit television and communication systems, upgraded traffic signal cabinets, controllers and detection systems, and a changeable message board. A 0.05 credit is applied to the ICU at intersections where the ATMS strategies are employed.

For the ATMS strategies to be successful, it is not a prerequisite that the ATMS strategies be applied to a series of signalized intersections. As discussed above, the ATMS strategies improve the intersection ICU by 0.05. However, to improve the average control delay through a series of intersections, the intersections can be coordinated (synchronized) to reduce the time spent idling at an intersection by adjusting the signal timing. As discussed in Section 5.5.3.7 of the DEIR, the LOS for intersections was determined by the intersection ICU and not by the intersection average control delay. The intersection ICU is a quantitative ratio that compares the intersection volume to capacity. Therefore, coordinating (synchronizing) the intersections improves the average control delay, but does not improve the intersection ICU because the intersection must still process the same volume with the same capacity. No additional mitigation measures are required.

B1-9 Comment noted. Refer to the response to comment B1-6, above.

B1-10 Comment noted. IWMD is considering changing the hours of operation at the landfill from 7:00 A.M. to 5:00 P.M. to 6:00 A.M. to 4:00 P.M. Under changed operating hours of 6:00 A.M. to 4:00 P.M., transfer trucks only are proposed from 6:00 A.M. to 7:00 A.M.

A sensitivity analysis was performed to determine the traffic impacts the proposed project would have on the circulation network if the operating hours at the landfill were changed.

The landfill currently operates 10 hours a day from 7:00 A.M. to 5:00 P.M. All waste hauling trucks can access the landfill between 7:00 A.M. to 4:00 P.M. However, only transfer trucks are allowed between 4:00 P.M. and 5:00 P.M. This sensitivity analysis evaluated the traffic impacts if the landfill changed its operation hours from 6:00 A.M. to 4:00 P.M. with transfer trucks only allowed between 6:00 A.M. to 7:00 A.M.

As indicated in Section 5.5-38, no additional significant adverse traffic impacts would occur if the IWMD changed the hours of operation.

- B1-11 The potential off-site traffic impacts were evaluated for the future-with-project in 2030 case and the future-without-project in 2030 case (i.e., FRB Landfill closed). This was presented and discussed in Section 5.7.4.3 and 5.7.4.4 of the DEIR. Except along Bee Canyon Road itself (Receptor #5), the issue of “expansion” versus “extension” is moot, there is no audible difference with or without the project (+1 dBA at one receptor, 0 dBA at all others). As discussed in Section 5.7.4.1 of the DEIR, the actual sound from the on-site landfill operations is substantially attenuated by the distance to any sensitive off-site receptors resulting in low sound levels with no impact potential and only occasional audibility.
- B1-12 New or relocated flares would be painted with non-reflective colors, as necessary, so that no significant light/glare impacts would occur. In addition, for each flare, the flame would be contained entirely within the stack so that no significant visual impacts would occur. The future relocation of the flares would not result in any significant impacts to aesthetics. No mitigation measures would be required. The flares will continue to operate 24-hours per day to provide for public health and safety.
- B1-13 All environmental impacts have been mitigated to below a level of significance as described in the DEIR, except those identified otherwise. Additional issues or concerns raised by the City or Home Owner Associations will be part of the ongoing discussion with the City to arrive at a mutually satisfactory agreement. IWMD plans to negotiate a mutually acceptable agreement with Irvine that will guide the relationship between the City and the department. The existing Settlement Agreement was entered into by the City and the County to resolve former litigation, and it is not necessarily the appropriate legal mechanism to memorialize future terms and conditions. IWMD intends to work towards consensus on an agreement that will guide the relationship of IWMD and the City, and address the City’s interests regarding the expansion of the FRB Landfill. While the mitigation measures set forth in the EIR fully address the project’s identified impacts, the agreement has the ability to provide for additional responses to the City’s concerns in a mutually acceptable manner. Additional concerns of homeowners associations may also be addressed in that process. Also, refer to response to comment R2-17.
- B1-14 Comment noted. Refer to response to comment R2-17.
- B1-15 Comment noted. Refer to response to comment R2-17.



- B1-16 Refer to response to comment R2-17. Coastal sage scrub (CSS) is the vegetative cover on the existing slopes adjacent to the landfill. Therefore, seeding the interim and final slopes of the landfill with this cover, as provided in mitigation measure AS-1, would result in an appearance that would blend most effectively with adjacent areas. It should be noted that slopes will have horizontal and vertical drainage channels. However, contouring and vegetation will ultimately screen these channels. For vertical drains that are required in the middle of slope faces, buried down drain pipes may be used rather than channels to minimize visibility from off-site locations. As the CSS reaches maturity it will obscure the drainage features as effectively as other types of plants, and it has the advantage of blending with the cover on adjacent hills.
- B1-17 Comment noted. The last sentence of the second paragraph on page 5.9-1 of the DEIR is corrected by reference to read: “The closest existing and planned residential uses are in the City of Irvine south, southwest, and west of the landfill” instead of “The closest existing and planned residential uses are in the City of Irvine south and southwest of the landfill.” In addition, Figure 5.9-1 has been revised to reflect recent annexation of Planning Area 1 (west of the landfill).
- B1-18 Comment noted. IWMD plans to negotiate a mutually acceptable agreement with Irvine that will guide the relationship between the City and the department. The existing Settlement Agreement was entered into by the City and the County to resolve former litigation, and it is not necessarily the appropriate legal mechanism to memorialize future terms and conditions. IWMD intends to work towards consensus on an agreement that will guide the relationship of IWMD and the City, and address the City’s interests regarding the expansion of the FRB Landfill. While the mitigation measures set forth in the EIR fully address the project’s identified impacts, the agreement has the ability to provide for additional responses to the City’s concerns in a mutually acceptable manner.



March 7, 2006

Ms. Cymantha Atkinson  
County of Orange, Integrated Waste Management Department  
320 North Flower Street, Suite 400  
Santa Ana, CA 92703

B2

**Subject: Draft EIR – Regional Landfill Options for Orange County (RELOOC)  
Strategic Plan – Frank R. Bowerman Landfill Implementation**

Dear Ms. Atkinson:

The Orange County Great Park Corporation has reviewed the Draft Environmental Impact Report for the above referenced project. We concur with the goals of the County's plan to expand local landfill capacity to enable Orange County residents, businesses, and agencies to avoid the higher costs of transporting waste to out-of-County landfills and to allow for continued local control over landfill disposal fees.

B2-1

Our review has focused on the aesthetic impacts to the viewshed and water quality issues with regard to potential surface and groundwater impacts. We support the comments made by the City of Irvine in this regard. We have no additional comments on the project.

B2-2

We remain in close contact with the City's Public Works Director Marty Bryant and will look forward to reviewing your responses to him when they become available.

B2-3

Sincerely,

A handwritten signature in cursive script, appearing to read 'Wally Kreutzen'.

WALLY KREUTZEN  
Chief Executive Officer

cc Marty Bryant, Director of Public Works  
Mike Byrne, Senior Management Analyst  
Glen Worthington, Manager of Planning & Environmental

Orange County Great Park Corporation  
P.O. Box 19575 • Irvine, California 92623-9575  
[www.ocgp.org](http://www.ocgp.org)

**B2      RESPONSES TO COMMENTS FROM THE ORANGE COUNTY GREAT PARK  
DATED MARCH 7, 2006**

B2-1    Comments noted. No response necessary.

B2-2    Comments noted. Refer to responses for comment letter R2.

B2-3    Comments noted. No response necessary.



**Irvine Unified School District**  
**CONSTRUCTION AND FACILITIES**

14600 Sand Canyon Ave., Irvine, CA 92618, 949/936-5307, FAX 949/936-5329, [www.iusd.org](http://www.iusd.org)

April 10, 2006

Cymantha Atkinson  
County of Orange, Integrated Waste Management Department  
320 North Flower Street, Ste 400  
Santa Ana, CA 92703

B3

**RE: Draft Environmental Impact Report No. 604**  
**Frank R. Bowerman Landfill Implementation**

Dear Ms. Atkinson,

The Irvine Unified School District (District) appreciates the opportunity to comment on the County's Environmental Impact Report (EIR) for the Frank R. Bowerman Landfill Implementation. The project does not appear to have any significant impacts to existing District school sites, but it is difficult to determine if there are any impacts to future schools that are currently in the planning process. The maps in the document are not to scale which makes it hard for the District to determine if there are any impacts to future schools that are in the development process. For example, in Figure 5.1-1 it is difficult for the District to see how far the landfill boundary is from the two proposed schools in the Portola Springs development that is currently being graded. Therefore, the District is requesting that maps within the EIR be to scale to help evaluate impacts to school sites in the new development areas of Irvine.

B3-1

  
Susan Ahn  
Facilities Planner

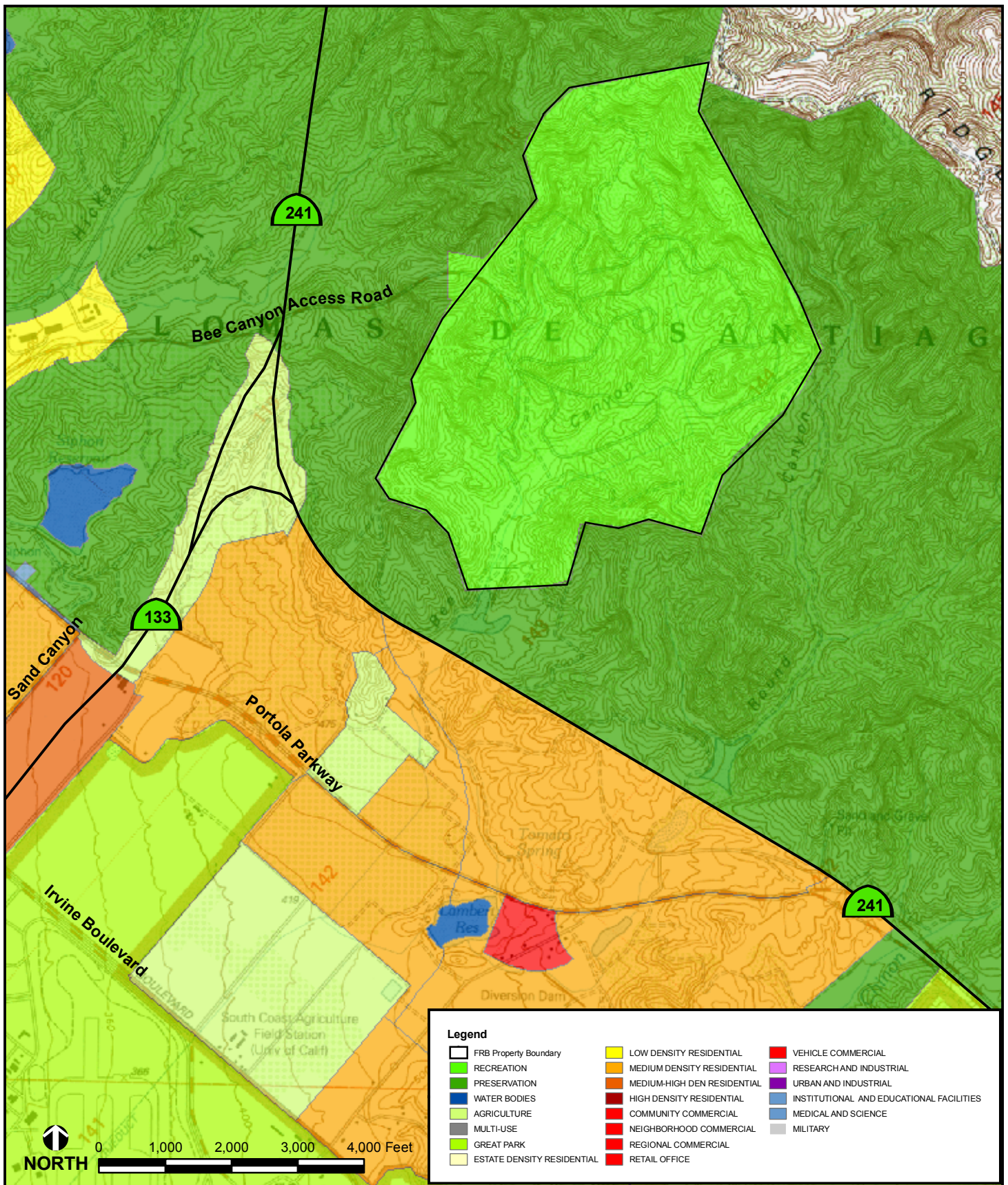
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**IUSD . . . providing the highest quality educational experience we can envision.**

**B3      RESPONSES TO COMMENTS FROM THE IRVINE UNIFIED SCHOOL DISTRICT CONSTRUCTION AND FACILITIES DATED APRIL 10, 2006**

- B3-1    Comment noted. Figures 5.9-1 and 5.9-2 of the DEIR are to scale and will assist you in determining how far the FRB Landfill boundary is from the two proposed schools referenced in comment letter B3. In addition, a new figure has been created to assist you in determining how far the FRB Landfill boundary is from the two proposed schools and is attached (next page) as an information item.



Source: El Toro, Black Star Canyon, Laguna Beach, Orange, San Juan Capistrano, and Tustin Quadrangles (USGS, 1997); FRB Property Boundary (based on DWG files by BAS, 2004); City of Irvine General Plan (City of Irvine, 2003).

**Figure for Comment Letter B3**

# **ATTACHMENT A**

## **NOTICE OF COMPLETION AND NOTICE OF AVAILABILITY**



## Notice of Completion & Environmental Document Transmittal

Appendix C

Mail to: State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613  
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # **2005071102**

**Project Title:** Regional Landfill Options for Orange County (RELOOC) Strategic Plan - Frank R. Bowerman (FRB) Landfill Implementation

Lead Agency: County of Orange Integrated Waste Management Department (IWMD)

Contact Person: Cymantha Atkinson

Mailing Address: 320 N. Flower Street, Suite 400

Phone: 949-337-5014

City: Santa Ana, CA

Zip: 92703

County: Orange

### Project Location:

County: Orange

City/Nearest Community: City of Irvine

Cross Streets: Sand Canyon Avenue and Portola Parkway

Zip Code: 92602

Assessor's Parcel No.: Section: 118,143, 144 Twp.: 5S Range: 8W Base: El Toro Quad.

Within 2 Miles: State Hwy #: SR 133 and SR 241 Waterways: None

Airports: Marine Corps Air Station El Toro (decommissioned/no longer operating) Railways: None Schools: None

### Document Type:

CEQA: ☐ NOP

☒ Draft EIR

NEPA: ☐ NOI

Other: ☐ Joint Document

☐ Early Cons

☐ Supplement/Subsequent EIR

☐ EA

☐ Final Document

☐ Neg Dec

(Prior SCH No.)

☐ Draft EIS

☐ Other

☐ Mit Neg Dec

☐ Other

☐ FONSI

### Local Action Type:

☐ General Plan Update

☐ Specific Plan

☐ Rezone

☐ Annexation

☐ General Plan Amendment

☐ Master Plan

☐ Prezone

☐ Redevelopment

☐ General Plan Element

☐ Planned Unit Development

☐ Use Permit

☐ Coastal Permit

☐ Community Plan

☐ Site Plan

☐ Land Division (Subdivision, etc.)

☒ Other Project

### Development Type:

☐ Residential: Units \_\_\_\_\_ Acres \_\_\_\_\_

☐ Water Facilities: Type \_\_\_\_\_ MGD \_\_\_\_\_

☐ Office: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_

☐ Transportation: Type \_\_\_\_\_

☐ Commercial: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_

☐ Mining: Mineral \_\_\_\_\_

☐ Industrial: Sq.ft. \_\_\_\_\_ Acres \_\_\_\_\_ Employees \_\_\_\_\_

☐ Power: Type \_\_\_\_\_ MW \_\_\_\_\_

☐ Educational

☒ Waste Treatment: Type Landfill Expansion MGD

☐ Recreational

☐ Hazardous Waste: Type \_\_\_\_\_

Total Acres (approx.) \_\_\_\_\_

☒ Other: Revisions to Solid Waste Facilities Permit

### Project Issues Discussed in Document:

☒ Aesthetic/Visual

☐ Fiscal

☒ Recreation/Parks

☒ Vegetation

☒ Agricultural Land

☒ Flood Plain/Flooding

☒ Schools/Universities

☒ Water Quality

☒ Air Quality

☒ Forest Land/Fire Hazard

☒ Septic Systems

☒ Water Supply/Groundwater

☒ Archeological/Historical

☒ Geologic/Seismic

☒ Sewer Capacity

☒ Wetland/Riparian

☒ Biological Resources

☒ Minerals

☒ Soil Erosion/Compaction/Grading

☒ Wildlife

☐ Coastal Zone

☒ Noise

☒ Solid Waste

☒ Growth Inducing

☒ Drainage/Absorption

☒ Population/Housing Balance

☒ Toxic/Hazardous

☒ Land Use

☐ Economic/Jobs

☒ Public Services/Facilities

☒ Traffic/Circulation

☒ Cumulative Effects

☒ Other Utilities

### Present Land Use/Zoning/General Plan Designation:

County of Orange Land Use designation - Public Facilities/Landfill Site (4(LS)) and County of Orange Zoning designation - Public Facilities.

### Project Description: (please use a separate page if necessary)

The proposed project includes: 1) Phased vertical and horizontal expansions of the FRB Landfill within the existing property boundary; 2) Temporary disturbance outside the property boundary for slope stabilization and remediation, to remediate the effects of the 2002 landslide; 3) An annual average of 8,500 tons per day (TPD) with an increase in the daily maximum to 11,500 TPD; 4) A Soil Management Plan that preserves adjacent canyons by stockpiling operational dirt on the landfill site and 5) Provisions to ensure that plant and animal habitats on the landfill property continue to be planned for and protected.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Revised 2004



## Reviewing Agencies Checklist

Appendix C, continued

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with an "X".  
If you have already sent your document to the agency please denote that with an "S".

<input type="checkbox"/> Air Resources Board	<input type="checkbox"/> Office of Historic Preservation
<input type="checkbox"/> Boating & Waterways, Department of	<input type="checkbox"/> Office of Public School Construction
<input type="checkbox"/> California Highway Patrol	<input checked="" type="checkbox"/> Parks & Recreation
<input type="checkbox"/> Caltrans District # _____	<input type="checkbox"/> Pesticide Regulation, Department of
<input type="checkbox"/> Caltrans Division of Aeronautics	<input type="checkbox"/> Public Utilities Commission
<input type="checkbox"/> Caltrans Planning (Headquarters)	<input type="checkbox"/> Reclamation Board
<input type="checkbox"/> Coachella Valley Mountains Conservancy	<input checked="" type="checkbox"/> Regional WQCB # (Santa Ana Region)
<input type="checkbox"/> Coastal Commission	<input type="checkbox"/> Resources Agency
<input type="checkbox"/> Colorado River Board	<input type="checkbox"/> S.F. Bay Conservation & Development Commission
<input type="checkbox"/> Conservation, Department of	<input type="checkbox"/> San Gabriel & Lower L.A. Rivers and Mtns Conservancy
<input type="checkbox"/> Corrections, Department of	<input type="checkbox"/> San Joaquin River Conservancy
<input type="checkbox"/> Delta Protection Commission	<input type="checkbox"/> Santa Monica Mountains Conservancy
<input type="checkbox"/> Education, Department of	<input type="checkbox"/> State Lands Commission
<input type="checkbox"/> Energy Commission	<input type="checkbox"/> SWRCB: Clean Water Grants
<input checked="" type="checkbox"/> Fish & Game Region # <u>5</u>	<input type="checkbox"/> SWRCB: Water Quality
<input type="checkbox"/> Food & Agriculture, Department of	<input type="checkbox"/> SWRCB: Water Rights
<input checked="" type="checkbox"/> Forestry & Fire Protection (Orange County)	<input type="checkbox"/> Tahoe Regional Planning Agency
<input type="checkbox"/> General Services, Department of	<input type="checkbox"/> Toxic Substances Control, Department of
<input type="checkbox"/> Health Services, Department of	<input type="checkbox"/> Water Resources, Department of
<input type="checkbox"/> Housing & Community Development	<input checked="" type="checkbox"/> Other <u>City of Irvine, US Army Corps. of Engineers, LA District</u>
<input checked="" type="checkbox"/> Integrated Waste Management Board	<input checked="" type="checkbox"/> Other <u>SCAG, SCAQMD, OCTA, US Fish &amp; Wildlife Service</u>
<input type="checkbox"/> Native American Heritage Commission	
<input type="checkbox"/> Office of Emergency Services	

### Local Public Review Period (to be filled in by lead agency)

Starting Date January 24, 2006

Ending Date March 9, 2006

### Lead Agency (Complete if applicable):

Consulting Firm: P&D Consultants

Applicant: County of Orange, IWMD

Address: 999 Town and Country Road, 4th Floor

Address: 320 North Flower Street, Suite 400

City/State/Zip: Orange, CA 92868

City/State/Zip: Santa Ana, CA 92703

Contact: Jerry Flores

Phone: 949-337-5014

Phone: 714-835-4447

Signature of Lead Agency Representative: \_\_\_\_\_

*Cynthia Alkisen*

Date: 1-23-06



# PUBLIC NOTICE of Availability

# POSTED

## DRAFT ENVIRONMENTAL IMPACT REPORT NO. 604

JAN 24 2006

**PROJECT:** Regional Landfill Options for Orange County Strategic Plan – Frank R. Bowerman Landfill Implementation  
By TOM DALY, CLERK-RECORDER  
1/24/06 DEPUTY

**PROJECT DESCRIPTION:** The Draft Environmental Impact Report (DEIR) evaluates the potential environmental impacts associated with the continued operation of the Frank R. Bowerman (FRB) Landfill through the proposed closure year 2053. The proposed project includes: 1) Phased vertical and horizontal expansions of the FRB Landfill within the existing property boundary. 2) Temporary disturbance outside the property boundary to remediate the 2002 landslide. 3) An annual average of 8,500 tons per day with a daily maximum of 11,500 tons per day. 4) A Soil Management Plan that preserves adjacent canyons by stockpiling operational dirt on-site and 5) Provisions to ensure that plant and animal habitat continue to be planned for and protected. This DEIR documents the technical analysis of the potential impacts of the proposed project related to land use and planning, geology and soils, hydrogeology and water quality, surface water hydrology, transportation and circulation, air quality, noise, biological resources, aesthetics, cultural and scientific resources, and hazards and risk of upset. Significant unavoidable adverse impacts that cannot be avoided or mitigated below a level of significance were identified for air quality, biological resources and aesthetics.

The DEIR has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970, as amended (California Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations Section 15000 et seq.).

**PROJECT CONTACT:** Linda Hagthorp, Public Information Officer

**PHONE:** (714) 834-4176

**WRITTEN COMMENTS:** The DEIR is being circulated for public review and comment from January 24, 2006 to March 9, 2006. All comments must be written and should be directed to Cymantha Atkinson, County of Orange, IWMD. **Comments are due no later than March 9, 2006 at the address below.** Pursuant to State law, comments received after that date may not be considered. Comments may also be submitted via e-mail to: [FRBEIR@iwmd.ocgov.com](mailto:FRBEIR@iwmd.ocgov.com)

Comments should be addressed to:  
Cymantha Atkinson  
County of Orange, Integrated Waste Management Department  
320 North Flower Street, Suite 400  
Santa Ana, CA 92703

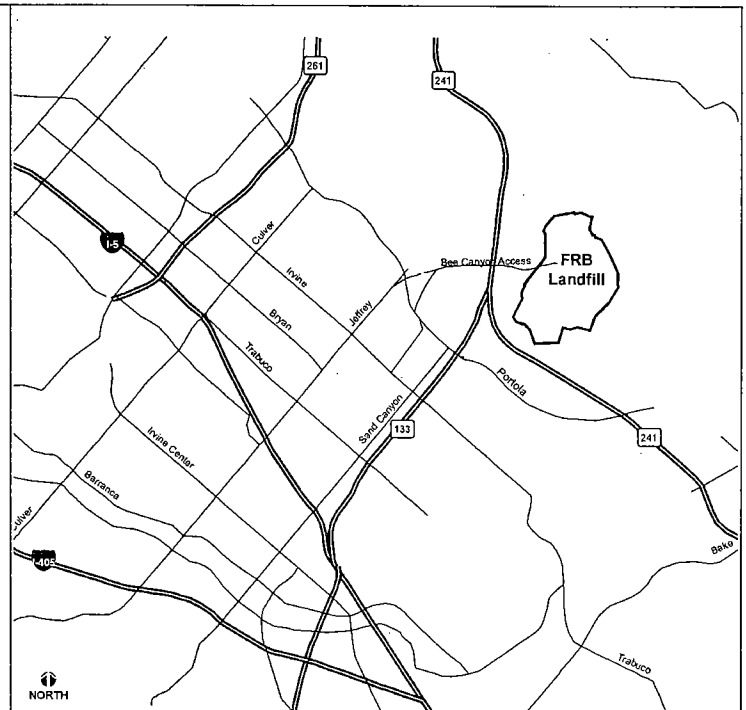
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or view online at [www.oclandfills.com](http://www.oclandfills.com)

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 ) ss.  
County of Orange )

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of **The Orange County Register**, a newspaper of general circulation, published in the city of Santa Ana, County of Orange, and which newspaper has been adjudged to be a newspaper of general circulation by the Superior Court of the County of Orange, State of California, under the date of 1/18/52, Case No. A-21046, that the notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

January 26, 2006

"I certify (or declare) under the penalty of perjury under the laws of the State of California that the foregoing is true and correct":

Executed at Santa Ana, Orange County, California, on

Date: January 26, 2006

Signature

**The Orange County Register**  
625 N. Grand Ave.  
Santa Ana, CA 92701  
(714) 796-7000 ext. 2209

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**PUBLIC NOTICE**  
of Availability  
**DRAFT ENVIRONMENTAL IMPACT REPORT NO. 604**

**PROJECT:** Regional Landfill Options for Orange County Strategic Plan - Frank R. Bowerman Landfill Implementation

**PROJECT DESCRIPTION:** The Draft Environmental Impact Report (DEIR) evaluates the potential environmental impacts associated with the continued operation of the Frank R. Bowerman (FRB) Landfill through the proposed closure year 2053. The proposed project includes: 1) Proposed vertical and horizontal expansions of the FRB Landfill within the existing property boundary; 2) Temporary disturbance during the property boundary to remediate the 2000 FRB Landfill; 3) An annual average of 8,500 tons per day with a daily maximum of 10,000 tons per day; 4) A San Manager and animal husband continue to be planned and practiced. This DEIR documents the technical analysis of the potential impacts of the proposed project on the land use and planning, geology and soil, hydrogeology and water quality, air, traffic, water, hydrology, transportation and circulation, air quality, noise, biological resources, aesthetics, cultural and scientific resources, and hazards and risk of upset. Significant unavoidable adverse impacts that cannot be avoided or mitigated below a level of significance were identified for air quality, biological resources, and aesthetics.

The DEIR has been prepared in accordance with the California Environmental Quality Act (CEQA), 1970, as amended (California Resources Code Section 21000 et seq.) and the CEQA guidelines (California Code of Regulations, Title 14, Section 15000 et seq.).

**PROJECT CONTACT:** Linda Hagthorn, Public Information Officer, PHONE: (714) 834-4176

**WRITTEN COMMENTS:** The DEIR is being circulated for public review and comment from January 26, 2006 to March 9, 2006. All comments must be written and should be directed to Cynthia Arkinson, County of Orange Integrated Waste Management Department, 420 North Flower Street, Suite 400, Santa Ana, CA 92703. Comments received after the date may not be considered. Comments may also be submitted via email to FRBER@wmd.co.gov.

Comments should be addressed to: Cynthia Arkinson, County of Orange Integrated Waste Management Department, 420 North Flower Street, Suite 400, Santa Ana, CA 92703.

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Contact: Linda Hagthorn, (714) 834-4176  
Review online at: [www.oclandfills.com](http://www.oclandfills.com)

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242 Avenida del Mar, San Clemente  
8149 JBL Canyon Road, San Juan Capistrano

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**Map:** A map showing the location of the FRB Landfill and surrounding areas, including major roads and landmarks.

Published: Orange County Register, January 26, 2006 R31634-135

## AFFIDAVIT OF PUBLICATION

STATE OF CALIFORNIA, )  
 ) ss.  
County of Orange )

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the **Irvine World News**, a newspaper that has been adjudged to be a newspaper of general circulation by the Superior Court of the County of Orange, State of California, on August 23, 1990, Case No. A-154653 in and for the City of Irvine, County of Orange, State of California; that the notice, of which the annexed is a true printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

January 26, 2006

"I certify (or declare) under the penalty of perjury under the laws of the State of California that the foregoing is true and correct":

Executed at Santa Ana, Orange County,  
California on

Date: January 26, 2006

Signature:

Julie Hammell

**Irvine World News**  
625 N. Grand Ave.  
Santa Ana, CA 92701  
(714) 796-2209

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see  
attached

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DRAFT ENVIRONMENTAL IMPACT REPORT NO. 604

**PROJECT:** Regional Landfill Options for Orange County Strategic Plan - Frank R. Bowerman Landfill Implementation

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**PHONE:** (714) 834-4176

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County of Orange, Integrated Waste Management Department  
320 North Flower Street, Suite 400  
Santa Ana, CA 92703

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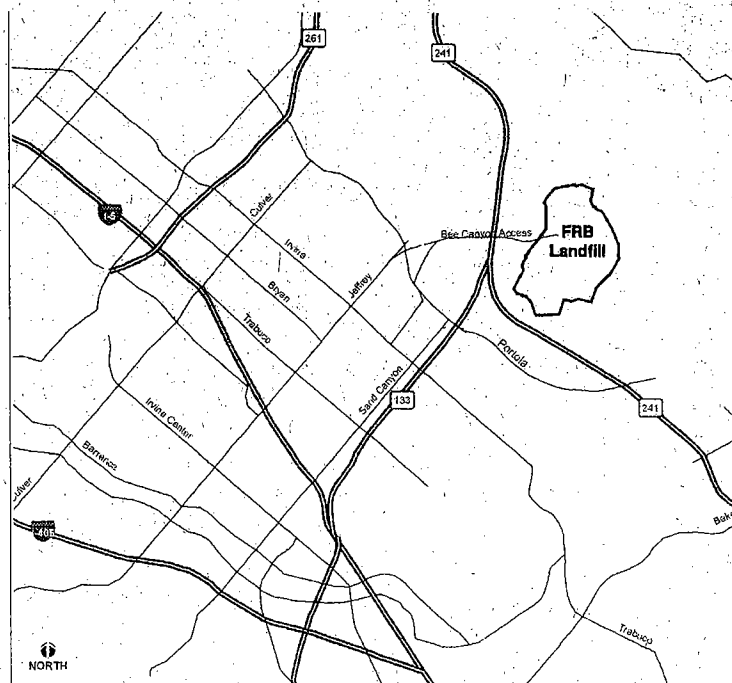
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## **ATTACHMENT B**

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Sacramento, CA 95812-3044

Sam Abu-Shaban  
Solid Waste Local Enforcement Agency  
HCA/Env. Health Division  
1241 E. Dyer Road, Suite 120  
Santa Ana, CA 92705-4720

Tina Christiansen  
City of Irvine  
Community Development Dept.  
One Civic Center Plaza  
Irvine, CA 92623-9575

Patricia Henshaw  
Solid Waste Local Enforcement Agency  
HCA/Env. Health Division  
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Waste Management Commission  
2672 N. Vista Crest Rd.  
Orange, CA 92867

Randal Bressette  
Waste Management Commission  
949 South Coast Drive  
Suite 1758  
Costa Mesa, CA 92626

Anthony Florentine  
Waste Management Commission  
626 N. Mountain View Place  
Fullerton, CA 92831

Jim Gomez  
Waste Management Commission  
201 E. La Habra Blvd.  
La Habra, CA 90631

Cathy Green  
Waste Management Commission  
6151 Kimberly Dr.  
Huntington Beach, CA 92647

Ron Hoesterey  
Waste Management Commission  
805 S. Sapphire Lane  
Anaheim, CA 92807

Pat McGuigan  
Waste Management Commission  
5642 Keelson Ave.  
Santa Ana, CA 92704

Tim O'Donnell  
Waste Management Commission  
1 Civic Center Circle  
Brea, CA 92821

Bob Ooten  
Waste Management Commission  
2846 Tabago Place  
Costa Mesa, CA 92626

Victor Opincar  
Waste Management Commission  
630 Mystic View  
Laguna Beach, CA 92651

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