APPENDIX B

Biological Conditions at
Ascon Landfill Site,
December 2004,
Huntington Beach, California

Dudek & Associates, Inc.

October 3, 2005

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Ken Fredianelli
Project Navigator, Ltd.
One Point Drive, Suite 320
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Subject: ***Biological Conditions at Ascon Landfill Site, December 2004, Huntington Beach, California***

Dear Mr. Fredianelli:

On December 15th, 2004, Dudek & Associates, Inc. (Dudek) biologist Michelle Balk conducted a biological reconnaissance survey of the approximately 38-acre Ascon Landfill Site in the City of Huntington Beach, California.

1.0 PROJECT LOCATION

The approximately 38-acre Ascon Landfill Site is located southwest of the intersection of Magnolia Street and Hamilton Avenue in the City of Huntington Beach, California. The property lies within the U.S. Geological Survey 7.5 minute map, Newport Beach Quadrangle: Section 13; Township 6 South, Range 11 West (*Figures 1* and *2*). Surrounding land uses include residential to the east; Edison Community Park to the north, an electricity generating plant to the east, and an oil storage facility to the south. The site is approximately 0.4 mile from the Pacific Ocean.

2.0 METHODS

Review of Existing Data

Prior to the field investigation, a review of the existing biological documentation for the Ascon Landfill Site was conducted, including the California Natural Diversity Database (CNDDB) [California Department of Fish and Game (CDFG) 2004a-d] and the previous Biological Survey Report for the Ascon Landfill Site prepared by Dudek in July 1996. According to the CNDDB, no sensitive plants or animal species are known to occur onsite. Steve Howe (Project Navigator, Ltd.) indicated that surface soils onsite consist of fill soils from an unknown location (personal communication). However, soils mapped onsite in the past (Wachtell 1978) were mapped as Bolsa Silt Loam. Soils in the Bolsa Series formed in alluvium and are present on alluvial fans from five to 300 feet in elevation. Bolsa soils are generally alkaline and somewhat slowly permeable (Wachtell 1978). Regardless, plant species observed

onsite during biological reconnaissance indicate that soils onsite are indeed alkaline and slowly permeable.

Resource Mapping

A biological survey of the property was conducted by Dudek biologist Michelle Balk on December 15th, 2004. The survey was conducted on foot, and the entire property was walked to complete the resource mapping. Onsite vegetation types, using the Jones & Stokes (1993) and Gray and Bramlet (1992) nomenclature system, were mapped directly on a topographic/aerial photograph base map. The site was surveyed for "waters of the U.S.", including wetlands, but the project site does not appear to support sensitive aquatic resources. The potential for sensitive wildlife or plant species to occur on the project site was evaluated based on the vegetation communities and soils present. Following completion of field work, all vegetation polygons were transferred to a topographic base and digitized into an AutoCAD drawing and, using ArcCAD, a geographic information system (GIS) coverage was created. Once in ArcCAD, acreage of each vegetation type was determined.

3.0 RESULTS

Vegetation/Land Cover Types

Based on species composition and general physiognomy, four vegetation types/land covers were identified during the field survey: baccharis scrub (including disturbed baccharis scrub), disturbed cismontane alkali marsh, ornamental/ruderal/disturbed land, and oil and drilling waste disposal ponds. These vegetation types or land covers are described below, their acreages are presented in *Table 1*, and their spatial distributions are presented in *Figure 3*. A list of plant and wildlife species observed or detected is included as *Appendix A*.

TABLE 1
ACREAGE BY VEGETATION/LAND COVER TYPE

Vegetation/Land Cover Type	Area (Acres)
Baccharis Scrub	0.1
Disturbed Baccharis Scrub	0.3
Disturbed Cismontane Alkali Marsh	0.2
Ornamental/Ruderal/Disturbed	28.7
Oil and Drilling Waste Disposal Ponds	8.6
Total	**37.9**

Baccharis scrub was mapped in areas where a single plant species, Emory's baccharis (*Baccharis emoryi*) dominates the area. Emory's baccharis generally occurs along sandy streams and washes and in salt

marshes; however, on the Ascon Landfill Site there are no streams or washes. Small patches of Emory's baccharis were present in the western region of the project site. One region was mapped as disturbed baccharis scrub due to the high proportion (approximately 60%) of non-native species present.

These non-natives included black mustard (*Brassica nigra*), star-thistle (*Centaurea melitensis*) and five-hook bassia (*Bassia hyssopifolia*). A total of 0.40 acre (0.3 acre disturbed and 0.1 acre undisturbed) of baccharis scrub was present on the Ascon Landfill Site.

Cismontane alkali marsh was present in a small, isolated patch in the extreme southwest corner of the project site. According to Jones and Stokes (1993), cismontane alkali marsh occurs in wet or inundated areas. These marshes are somewhat salty, particularly during summer, due to high evaporation and low inputs of fresh water. Soils are usually high in alkalinity (Holland 1986). Characteristic species include yerba mansa (*Anemopsis californica*), sedges (*Carex* spp.), alkali heath (*Frankenia grandiflora*), bulrushes (*Juncus* spp.), saltmarsh saltgrass (*Distichlis spicata*), cattails (*Typha* spp.), and pickleweed (*Salicornia* spp).

Cismontane alkali marsh onsite was dominated by common pickleweed (*Salicornia virginica*) and alkali heath. As no stream channel is associated with this vegetation type, water is provided through runoff from surrounding slopes and potentially a high water table in this area. This habitat type was classified as disturbed due to the high concentration of non-native species present, including Russian thistle (*Salsola tragus*), introduced grasses, and Australian saltbush (*Atriplex semibaccata*). 0.2 acre of disturbed cismontane alkali marsh was present onsite.

Ornamental/Ruderal/Disturbed refers to areas that either lack vegetation entirely or contain predominantly weedy, non-native plants or ornamental, landscape plants. The majority of the Ascon Landfill Site was composed of this land cover type. This area included the access roads, areas historically used for dumping concrete and asphalt, and the active oil drilling operation along the western border of the site. The majority of the vegetation cover in this area consisted of non-native ice plants (*Mesembryanthemum* spp.), hottentot-fig (*Carpobrotus edulis*), eucalyptus (*Eucalyptus* spp.), myoporum (*Myoporum laetum*), five-hook bassia, castor bean (*Ricinus communis*), giant cane (*Arundo donax*), garland chrysanthemum (*Chrysanthemum coronarium*), black mustard, wood sorrel (*Oxalis pes-caprae*) and tree tobacco (*Nicotiana glauca*). A lesser proportion of native species, such as saltmarsh heliotrope (*Heliotropium curassavicum*), alkali-mallow (*Malvella leprosa*), jimsonweed (*Datura wrightii*), and Emory's baccharis were also scattered throughout this land cover type onsite. Large numbers of the native southern tarplant (*Hemizonia parryi* ssp. *australis*), a California Native Plant Society (CNPS) List 1B species, were present, as were two individuals of southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*), a CNPS List 4 species (see Sensitive Species section below for further discussion).

Approximately 28.7 acres of disturbed/ruderal/ornamental land were present onsite.

Oil and drilling waste disposal ponds also occupied a large proportion of the site. Five oil storage ponds, covering 8.6 acres, were dispersed across the central and northern section of the study site. Two of these storage ponds were covered with a netting material to discourage wildlife from attempting to use the area for foraging. At the time of the field visit no wildlife species were observed trapped in any of the oil or in the netting.

Sensitive Species

Approximately 1,300 individuals of southern tarplant (CNPS List 1B) were observed on the site. Individuals are concentrated along the access road in the southern portion of the project site (*Figure 3*). This population size estimate represents a rough estimation of the number of individuals present on the site; a focused survey for this species onsite was outside the scope of this project, and if a more accurate population size estimate is desired, a focused survey should be conducted during the blooming period of the southern tarplant (May through November) when plants will be more visible. CNPS List 1B species are limited throughout their range, judged to be vulnerable under present circumstances or potentially vulnerable because of their limited or vulnerable habitat, their low number of individuals per population, or their limited number of populations (Skinner and Pavlik 1994).

Two individuals of spiny rush (CNPS List 4) were also observed near the center of the site in a shallow depression. CNPS List 4 species are of limited distribution or infrequent throughout a broader area in California, and their vulnerability or susceptibility to threat appears to be low at this time.

No sensitive wildlife species were observed onsite.

If you have any questions or comments, please do not hesitate to contact me at (760) 942-5147.

Very truly yours,

DUDEK & ASSOCIATES, INC.

Michelle Balk

Michelle Balk
Biologist

Att.: *Figures 1-3*
Appendix A, List of Species Observed Onsite

REFERENCES

California Department of Fish and Game. California Natural Diversity Database. 2004a. Special Animals List. August 2004.

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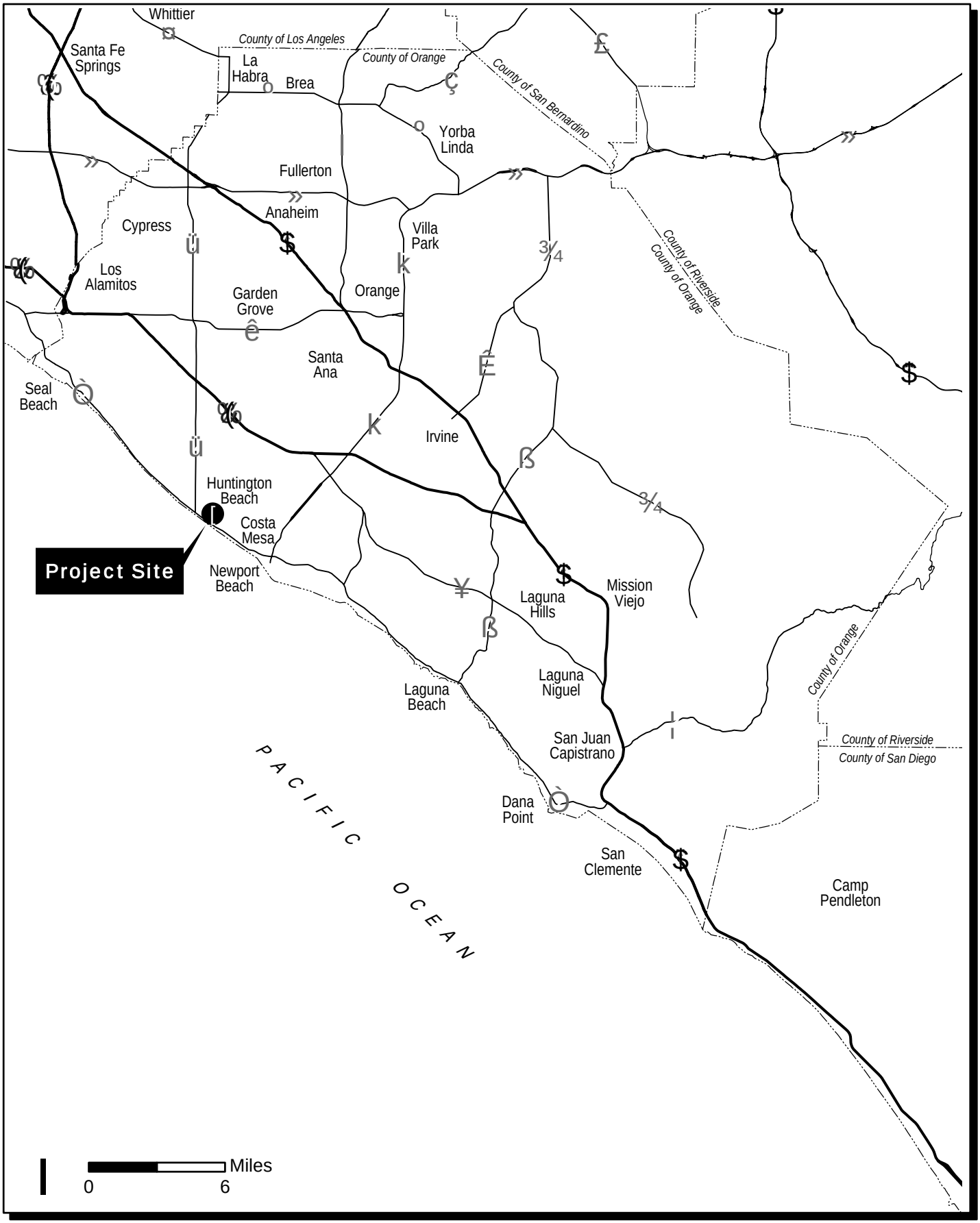

Ascon Landfill Site - Biological Conditions Report - December 2004

Regional Map

FIGURE 1

Ascon Landfill Site - Biological Conditions Report - December 2004

Vicinity Map

FIGURE 2

Legend

Project Boundary

Vegetation Types

Vegetation Types:
BS = Baccharis Scrub
dCSM = Disturbed Coastal Salt Marsh
ODP = Oil & Drilling Waste Disposal Pond
ORN/RUD/DH = Ornamental, Ruderal, Disturbed Habitat

BASE SOURCE: Project Navigator, Ltd.

Sensitive Plant Species:

Hp . . . Hermizonia parryi ssp. australis
Ja . . . Juncus acutus ssp. leopoldii

NOTE: A number indicates individual plant counts at that location.

0 100 200
Feet

Ascon Landfill Site - Biological Conditions Report - December 2004

Existing Conditions Map

FIGURE 3

APPENDIX A

List of Plant and Wildlife Species Observed Onsite

APPENDIX A

VASCULAR PLANT SPECIES

ANGIOSPERMS (DICOTS)

AIZOACEAE - FIG-MARIGOLD FAMILY

* *Carpobrotus edulis* - hottentot-fig
* *Mesembryanthemum crystallinum* - crystalline iceplant

ANACARDIACEAE - SUMAC FAMILY

* *Schinus molle* - Peruvian pepper tree

APIACEAE - CARROT FAMILY

* *Foeniculum vulgare* - fennel

ASTERACEAE - SUNFLOWER FAMILY

Ambrosia psilostachya - western ragweed
Baccharis emoryi - Emory's baccharis
Baccharis salicifolia - mule fat, seep-willow, water-wally
* *Centaurea melitensis* - tocalote
Centromadia [=*Hemizonia*] *parryi* ssp. *australis* - southern tarplant
* *Chrysanthemum coronarium* - garland or crown daisy
Conyza coulteri - Coulter's fleabane
Helianthus annuus - western sunflower
Isocoma menziesii ssp. *menziesii* -spreading goldenbush
* *Silybum marianum* - milk thistle
* *Sonchus asper* - prickly sow thistle
* *Sonchus oleraceus* - common sow thistle

BORAGINACEAE - BORAGE FAMILY

Heliotropium curassavicum - salt heliotrope

BRASSICACEAE - MUSTARD FAMILY

* *Brassica nigra* - black mustard
* *Lepidium latifolium* - perennial pepperweed
* *Raphanus sativus* – radish

CHENOPODIACEAE - GOOSEFOOT FAMILY

* *Atriplex semibaccata* - Australian saltbush

* *Bassia hyssopifolia* - five-hook bassia
Salicornia virginica - common woody pickleweed
* *Salsola tragus* - Russian thistle, tumbleweed

CONVOLVULACEAE - MORNING-GLORY FAMILY
Cressa truxillensis - alkali weed

EUPHORBIACEAE - SPURGE FAMILY
Ricinus communis - castor bean

FRANKENIACEA - FRANKENIA FAMILY
Frankenia salina - alkali heath

MALVACEAE - MALLOW FAMILY
Malvella leprosa - alkali-mallow, whiteweed

MYOPORACEAE - MYOPORUM FAMILY
* *Myoporum laetum* - ngaio, myoporum

MYRTACEAE - MYRTLE FAMILY
* *Eucalyptus* sp. - eucalyptus

OLEACEAE - OLIVE FAMILY
* *Olea europaea* - olive

OXALIDACEAE - WOOD-SORREL FAMILY
* *Oxalis pes-caprae* - Bermuda buttercup

POLYGONACEAE - BUCKWHEAT FAMILY
* *Rumex crispus* - curly dock

SOLANACEAE - NIGHTSHADE FAMILY
Datura wrightii - jimson weed
* *Nicotiana glauca* - tree tobacco

URTICACEEAE - NETTLE FAMILY
* *Urtica urens* - dwarf nettle

ANGIOSPERMAE (MONOCOTYLEDONES)

ARECACEAE - PALM FAMILY

Washingtonia sp. - fan palm

JUNCACEAE - RUSH FAMILY

Juncus acutus ssp. *leopoldi*- southwestern spiny rush

LILIACEAE - LILY FAMILY

* *Yucca elephantipes* - giant yucca

POACEAE - GRASS FAMILY

* *Arundo donax* - giant reed

* *Cortaderia selloana* - pampas grass

* signifies introduced (non-native) species

WILDLIFE SPECIES -VERTEBRATES

BIRDS

PHALACROCORACIDAE - CORMORANTS

Phalacrocorax sp. - cormorant (fly-over)

FALCONIDAE - FALCONS

Falco sparverius - American kestrel

SCOLOPACIDAE - SANDPIPERS

Limnodromus griseus - short-billed dowitcher

Tringa flavipes - lesser yellowlegs

Tringa solitaria - solitary sandpiper

LARIDAE - GULLS & TERNS

Larus sp. - gull

COLUMBIDAE - PIGEONS & DOVES

* *Columba livia* - rock dove

Zenaida macroura - mourning dove

TROCHILIDAE - HUMMINGBIRDS

Calypte anna - Anna's hummingbird

Sayornis nigricans - black phoebe

Sayornis saya - Say's phoebe

CORVIDAE - JAYS & CROWS

Corvus brachyrhynchos - American crow

AEGITHALIDAE - BUSHTITS

Psaltriparus minimus - bushtit

PARULIDAE - WOOD WARBLERS

Dendroica coronata - yellow-rumped warbler

Geothlypis trichas - common yellowthroat

EMBERIZIDAE - BUNTINGS & SPARROWS

Zonotrichia leucophrys - white-crowned sparrow

Molothrus ater - brown-headed cowbird

FRINGILLIDAE - FINCHES

Carpodacus mexicanus - house finch

MAMMALS

LEPORIDAE - HARES & RABBITS

Sylvilagus bachmani - brush rabbit

SCIURIDAE - SQUIRRELS

Spermophilus beecheyi - California ground squirrel

CANIDAE - WOLVES & FOXES

Canis latrans – coyote

* signifies introduced (non-native) species