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R.E.: Draft Environmental Impact Report (EIR) State California Clearinghouse No. 2009031061; Newport Banning Ranch Project

Esteemed Administrators,

Many extremely knowledgeable supporters of open space and preservation will be submitting comment regarding the above project; about the need for a Banning Ranch Conservancy, the need for habituate preservation and the need to maintain the interconnectivity this property might possess to our past and our future.

My comments have to do with the personal relationship I've had with this property, my understanding of this property and the land use. You see, I'm a 3<sup>rd</sup> generation oil industry worker, my Father PM 'Red' Mc Hale and his Father, my Grandfather Al 'Big Red' Mc Hale have all worked at the Banning Lease; during it's land use as an oil producing property.

My association with this land came before I was born, as my Father PM 'Red' Mc Hale worked as driller, tool pusher and GM for Al "Big Red' Mc Hale's oil drilling and "wildcat" oil exploration company Superior Oil Service. SOS drilled quite a few of the producers on the Banning Lease in the time after WWII. 'Big Red's' wildcat drilling operations and association with J 'Paul' Getty was such that he is found noted in Alan Cockrell's book <u>Drilling Ahead</u>. My Father 'Red' Mc Hale found his way back to the Banning Lease after the oil boom of the 1950's and worked there the majority of his adult employment history. 'Red' having studied Oil Engineering while at Compton College, raised himself to the 2<sup>nd</sup> in command of the Banning Lease operations thru his tenure. Under Fred Jones, Lease Superintendent; both men worked for the numerous operators of this oil lease operation, Burma Oil, Armstrong Oil, General Crude Oil, International Paper, Armstrong Oil LLC, Mobil Oil and West Newport Oil.

My 1<sup>st</sup> exposure to the Banning Lease was as a young pre-teen when my many summer weekends I would accompany by Father to work on his afternoon tour/swing shift and fish in the various switch backs of the wetlands and the Santa Ana River at low tide. This fishing for halibut was sometimes complimented by rabbit hunting with my .22 Remington rife. This activity was of course prior to the sanitation plant expansion and before the Ox Bow development.

My continuing exposure to the Banning Lease came in my own work history as I too became an oil industry (oil patch) worker. I started as a General Labor/Roustabout, Drilling Floor Hand/Derrick Hand/ Relief Driller, Production Services Derrick Hand/ Relief Gang Pusher and Junior Petroleum Engineer all on the Banning Lease.

Per this brief history it can be said I've been on this Lease at every time of day, at every operation level of this oil field's operations as a 'boots on the ground' employee. I'm not sure this makes me qualified in the scientific analysis of the petroleum engineering data or the biological resources of this diverse open space but I can attest to things I know and have seen-because I worked with them and lived among them.

I do hope this historic narrative is not so long winded as to sounding self promoting, yet I do want to comment that after reviewing the entire Bonterra Consulting Enviro research as presented in this lengthy document CEQA Review DEIR 10/2011, it's flawed in many findings in section 4.5 Hazards and Hazardous Materials.

My primary question lies in the choice of environmental consulting services, would not Dudek of San Diego have been a better environmental consulting services firm as a choice considering the level of environmental degradation found on this property. Dudek has a larger reference list regarding environmental consulting based on Naval owned properties, oil field abandonment/land reclamation in the San Diego Bay area and water issues through-out California. None-the-less my comments address many of the assumptions/conclusions authored by Bonterra Consulting.

It's known and addressed that this property has yet to satisfy the California Regional Water Quality Control Board/Santa Ana Region Clean-up and Abatement Order No. 01-77, yet some how a blanket exemption according to DOGGR is made reference to and not the Abatement Order. The specific case cited establishes why an exemption is in accord and is the California Coastal Zone Conservation Commission's 1973 Exemption Order No. E-7-27-73 but the Bonterra document provides an impression that possible NEW oil exploration operations could be forecast and the document is presented under this cloud, thus confusing project intent.

## Specifics I can attest to:

## Sampling protocol;

- o 4.5.3 Methodology; "approximately 489 producing/potentially producing and abandoned wells"; plus an additional 25 locations of interest per Exhibit 4.5-1, have been noted per report; yet, only "550 samples from 222 test pits/borings, 10 groundwater monitoring wells, surface water, and soil gas sampling points" were only executed. Why? DOGGR has historic record of California oil wells prior to 1940, why were all well locations not sampled? It's a far reaching to provide assessments based on incomplete data with reference to ASTM Standard E 2600, Standard Practice for Assessment of Vapor Intrusion into Structures on Property Involved in Real Estate Transactions.
- O My working knowledge; drilling operations during my tenure at the Banning Lease consisted of 2 portable 'drill and drive' rigs a Wilson and a Cardwell; both were modified well service rigs with portable components. Rotary table, mud pump draw-works, pipe racks, tool 'bin' and 'dog houses' all portable including the mud pump. These portable components are similar to today's land based oil field operations. The component being noted is the mud pump and mud pit. Both rigs were outfitted with Baker tank conversions that included bar screen shaker tables, return troughs, mixing stations and a contained mud pit. This style Baker tank mud pump conversions are not unusual in today's operations and are typically stand alone components. This is where the drilling operations at the Banning site differed. The mud pump and pit were set at grade level to the MAT

(surface elevation). Having been in the Roustabout department as noted above, our task was to help prepare and set up the proposed drill sites in advance of drilling operations (per annual funded program). Part of this preparation included excavation of site locations for drilling mat, oil well cellar, setting of conductor pipe and site for the mud pump and mud pit. This was done in 2 digs, one the width of the physical equipment approximately 8 feet deep and connected to this 1<sup>st</sup> dig was the 2<sup>nd</sup> hole used for cast offs, well tailings and drill mud fluid mix or chemical drill fluid mix (used for work-over) discharge. This 'dig' when complete looked like a small rectangle pool with a 'shallow end' (about 8 feet deep) and the 'deep end' (about 10 feet). If wells were in very close proximity to one another this 'dig' would accommodate both locations. A reference is made to this physical operation because Bonterra sampling protocol notes: Soil Sampling 4.5-8; "The hydrocarbon impacts observed were generally confined to the upper soil layers (i.e., within approximately six feet of the surface)". It appears that sample pot-holing did not sample all well locations and travel to effective depth of the mud pump mud pit and the tailing ponds. These pits contained the chemical 'witches brew' of modern drilling operations and are not noted in the sampling protocol. Most of this material was allowed to dry and the 'digs' buried with the native soil and some minor import soil.

O Further; based on the above observations this approximation per Bonterra: Soil Remediation Methods; 4.5-24, "Development of the Project would require the rough grading of approximately 2,400,000 cy of materials, inclusive of site remediation activities."; appears to put total soil remediation on the low end of the estimate.

## Assumptions regarding Exhibit 4.5-1;

The Bonterra Consulting groups mapping of the locations with Potential Environmental Concern Location Map excludes a few sites that need to be called out as potential hazardous environmental locations. A location not noted in the Potential Environmental Concern Location Map is along side the main road that leads from the "Hill" area to the "Flats" area. On the right side of this road are well locations in the 90's and early 100's. Two well sites in this area had major releases of H2S gas during work-over operations. Both releases had effects on oil workers working on the drilling rig performing well remediation (believe the work over was to replace the well's liner). These two separate incidents, one included near death, had Cal OSHA investigations with findings that imposed SCUBA operations when working below the well head or sub base of drilling rigs and is not noted in Bonterra Consulting's 4.5 review. Bonterra's review of the "Lowland pond REC/PEC3 # 02-Main Drill Site Tank Farm" states: "Analytical results indicate elevated methane concentrations, measured up to 73.2 percent of the collected vapor with no hydrogen sulfide detected". This review's language tends to provide a vanilla overview that H2S gas is not in residence on this site as 4.5 does not address this issue further. I'm surprised that historic research of these Cal OSHA incidents were not conducted as this would be a

- major Potential Environmental Concern-based on the average well depth, based on the total soil displacement and based on the understanding that H2S gas is a byproduct of a 'fire flood secondary recovery oil extraction' operations.
- In a similar observation an area on the Map, next to area # 3, between area # 18 and across from area # 5 was the location of the Gas Burn Off (flare off) Reactors. Again, based on the type of Secondary Recovery in progress: 'Fire Flood with Steam Injection Processes'-coupled with acid stimulus and chemical treatment-the byproduct of these operations were H2S gas and a "Sour Gas". The 'sour gas' was an extremely sulfuric gas that was not a marketable product and had to be "flared off". To accomplish this task the 'Reactors' needed to maintain a constant temp of 1500F to 1900F. This was a constant 24-7 operation for as long as the fire flood operation was in progress. I'm surprised that Bonterra Consulting did not research this location or provide 'pot-holing' sample results that would promote investigation based on the unusually high readings of sulfuric soil that were found in the soil/debris stockpiles, Exhibit 4.5-1 # 18. I had knowledge of this, sulfur was everywhere due to the operations of the 'flare off' many times visual as large yellow piles around a Reactor scheduled for maintenance. The air around this location was so caustic as to reduce the life expediency of the vehicle fleet required to service it by stripping paint and reducing metal composition of equipment making a premature life for equipment and vehicles. The heated air mass of spent gas would make contact with the sea air moisture or fog as to create mini-acid rain events on the Banning Lease and some surrounding locations. This 'stuff' would eat your overalls with-in a month of wear. My experience with these operations included monitor of the 24-7 burn- a mixture of Southern Cal Gas and the 'sour gas' was required, metering reading, logging of this activity (ppm, air quality), maintenance of instrumentation as required including the monitor of burn temp and the constant on-line operation (this operation was an hourly check protocol). At peak production 3 Reactors were required to 'flare off' the spoiled gas. Any long term down wind Resident of Costa Mesa can attest to the 'rotten eggs' smell of the sulfuric gas, when due to conditions, a Reactor would go down. Like-wise the 'flare off' station once near Hogue Hospital was also required due to this high sulfur content in natural gas although this station was maintained by operations outside the Banning Lease personnel. The 'rotten egg' VOC was such a nuisance that a misting system of 'bubble gum' scent was engineered and put into operation to combat the down wind Resident compliant.
- O Not registered on the Bonterra Consulting map: Potential Environmental Concern Location Map is a location south and somewhat included in area # 18. This location is was upon the 'Bluff' above the Oxbow Loop. This was an Engineering Out Building, which handled both manual and electronic weigh metering. This location was a maze of well head manifolds designed to perform this operation in a 24 hour cycle per DOG & E and DOGGR policy to ensure 'stripper production' weights. The Engineering Out building

was in the process of becoming fully electronic during my tenure on the Banning Lease. This site contained numerous 55 gal barrels of 'cut and sampling' dewatering chemicals, the most present was silicone. To ensure an accurate 24 hr weigh; needed to certify 'stripper production'; a well in test would be tagged in the field and the manifold opened for the test period. Byproduct was again 'sour gases' and was bleed to atmosphere thru bell containers to remove condensate and release gas per vessel psi. Open condensate ponds existed in this area where the gas was scrubbed for flare off. Manual bleeding was conducted during the morning tour-grave yard shift. This site was also engineered with 'bubble gum' scent misting systems. I'm surprised that downwind testing was not conducted due to the known cancer causing properties of these compounds. Also, in this location were two pilot heat scavengers that used the Btu of the Reactors in an attempt to make steam for the secondary recovery operations. As these units were engineering proto-type constructions the need to deconstruct, modify and clean where a regular assignment. Again the byproduct of this operation was 'yellow' sulfur. The ground location all around these locations was exposed to these high levels of VIC and based on the overall sampling it's questionable if the confusing baseline assumptions were achieved per this published document: "The pVIC evaluation performed is not intended to meet the substantive requirements of the ASTM Standard E 2600 tiered screening or to identify which pVICs are VICs. The approach taken in the Phase I ESA Update is similar to the first phase of conducting a Tier 1 non-numeric screening for vapor intrusion, whereby pVICs have been identified so that they may subsequently be evaluated (as needed) using a complete Tier 1 screen (Geosyntec 2008)."

- Continuing with the review of sites shown on the Bonterra Consulting Exhibit 4.5-1:
  - Site # 5 was used for potable water cleansing with removal of organics for the steam making operations used in the secondary oil recovery efforts. This location was difficult to maintain due to the sodium, sea air and the fact they were downwind of the Reactors. Rust remediation and vessel replacement was an ongoing operation. Heavy lead based primers and lead based paints (ship paint) was used to coat all the metal surfaces of these constructions and vessels. A reverse osmosis system was used with brine tank regeneration. Due to the problem of the location and salts, the vessels leaked and frankly this was not a major concern as long as the water samples had proper balance. The steam operations were the demand of the entire lease's operations. It was not uncommon to see mounds of spent salt and silicone beads all over the ground in this location. In review of the table 4.5-1, RANGE OF PHASE II ENVIRONMENTAL ASSESSMENT SOIL SAMPLE RESULTS, it appears no samples have been conducted and sampling data is restrictive to the 2001 protocol and is not reflective of this issue as noted above in what would seem an environmental soils issue related to the salts and silicone. Further, why would a competent study rely on a study conducted in 2001 that would affect new homes built in 2011? Again the reliance on data tainted by many factors including prior political activity as shown in: TABLE 4.5-3; SUMMARY OF PROJECT SITE RECOGNIZED ENVIRONMENTAL CONDITIONS (RECS)/POTENTIAL ENVIRONMENTAL CONCERN (PECS) really questions; has any new study work been conducted here in a decade regarding current site conditions, environmental concerns or human activity?

- Continuing comment on Bonterra Consulting Exhibit 4.5-1 'flats':
  - o Area # 2 has been widely discussed and was/is a crude oil dump including Area # 8. Dewatering operations included generous applications of silicone products to increase crude oil process separation of oil, sand, paraffin and shale. Annual clean out of heater treator/knock out tanks involved physical removal, bucket by bucket of residue. These buckets were dumped out on the ground, used to build breams when mixed with imported soil. Based on actual involvement this decades upon decades 'old school' maintenance cleaning operation could in no way be satisfied by the soil premeditations shown in TABLE 4.5-3. It's comical that Bonterra Consulting blind stamped the 2001 results as accurate measurements assuming no activity, including continuing maintenance operations, could have not taken place, in 10 years! Also included in Area # 2 are the stilling ponds that historically have caused environmental destruction to this lease, the wetlands, the tidal pools and waterways. I can recall receiving many overtime hours performing clean up operations during rainy seasons due to breaches in the stilling ponds ram earthen/oil dams. As an employee I recall numerous staff meetings were the prime discussion from management was the loss of migratory species and the threat of citation. The in-flight animals believed the ponds to be waterways and even with EPA approved netting they would become entangled in the crude oil soaked netting or unlucky found breaks in the netting only to find a pool of caustic crude oil, as their grave. Staff did provide tour/shift review of this location due to the historic environmental activities and US Fish and Wildlife's numerous citations. It is believed these stilling ponds date back as far as the 1940's. To believe again, the total cubic displacement and type of soil remediation required versus real on the ground findings per this TABLE 4.5-3 REQUIRED TO 'MAKE GOOD' this location is a
  - o Area # 7 thru to Area # 17 was the locations of water injection sites used to restrict sea water intrusion into the oil field. Most environmental groups performing investagations into an abandon oil field have knowledge of this operation and include it in their review due to the ground water issues of the injection process. All along the 'fence line' these wells were placed to keep the field from degrading into the sea water. Based on the type of 'barely fresh water' used in this operation it's concerning that no data is present regarding this highly polluting practice as the injection water was of the lowest quality. The report seems to put this burden on Army Corp of Engineers and their rehabilitation efforts along the Wetlands Restoration Area.
  - Areas # 16, # 21, # 24 & # 27 as noted in the Bonterra Consulting report seems to give the allure that this is an unaffected area and this was a non production area. THIS IS UNTRUE, this graphic area had production wells of various stripper gravity and some in this area had 'best' value. Also of note in the methodology the 'producers' utilized in their oil and gas separation at well site. Each well was equipped with a metered run for gas used to determine cubic volume and Bell vessels used as gas scrubbers at each meter run. At each gas scrubber was a bleed down and every well was checked and serviced with a bleed down to atmosphere as detailed earlier, per daily service. This well operation dispensed unknown gallons of petrol-hydrocarbons into the strata. The wells were in

o operation for how many years? To not have data that is reflective of this operation is 'just bad environmental work'. A few years of stock piling surface soil could not remediate decades of environmental abuse.

## **Summary of Comments:**

As an employee on this oil lease I saw environmental abuse. Operations of an oil property are un-healthy to living things. Years of environmental abuse cannot be remediated by piling up surface soil and hoping this will eliminate petroleum contaminations. Deep well issues are not on this lease; these are shallow wells, sometimes called the end of the pool wells. To believe wells abandoned in the 1950's or 1970's will sill remain abandoned and to not research this condition is to assume the impractical. A 1994 Government Accountability Office report could not have not summed up this issue succinctly (like it was looking at this lease): "If oil leaks from an improperly plugged well occur, there is risk that the environment and marine life will be adversely affected. Mammals, birds, shellfish and plants can be killed by oil." (PEOPLE?). Likewise, according to Terry Tamminen, former secretary of the California Environmental Protection Agency and author of Lives Per Gallon: The True Cost of Our Oil Addiction. "This is a problem in California. We have a century-old oil industry. How many wells were abandoned before regulations were put in place? Many wells were just wildcatted in—who knows where they are or how many there are. In the Baldwin Field alone, which sits in the center of urban Los Angeles, there are hundreds of abandoned wells." Officials, you want to build parks for kids and wonderful homes for your citizens here, shouldn't the environmental research do the proper home work?

The issues I've brought forward; non-sampling around well sites, the use of old outdated data, the assuming that because it wasn't pot holed for it doesn't exist as a health hazard, the belief that the highlands (hill) of lowlands (flats) are geographic disconnected and somehow one area is not environmental damaged or can be rehabilitated with a quick fix and we can build a park there; is just foolishness. Thinking by applying minor monitoring data for deadly gases like H2S will promote a clean bill of health, when documented Cal OSHA incidents tell us otherwise isn't poor science it's negligent and promotes an attitude of well being, until someone's home is filled with the colorless, odorless, death gas in a future housing development. Water issues, ACM, LBP and carbon sequestration have not even been addressed, including well abandonment. This was not a 'poor boy' random oil field operation. This was a secondary recovery operation enhance by fire flood, water flood and steam injection and 'wrote the book' on these type operations, to be used world wide. Simply, we pumped tons of cubic feet of oxygen underground into an oil zone and LIT IT ON FIRE, it melted the oil out, we used the water to float it out and that which was still stuck we steamed it out. This was the primary goal, none other, this was the business, and the environment was just; there in the way. To correct this will not be a 'remove some dirt six feet down pile it up and let the bugs clean it; project'. This is going to take real reverse engineering to reclaim this land, or leave it to Nature to correct.

Dennis Mc Hale