

## COMMENTS ON SECOND DRAFT WORK PLAN - NEX GAS STATION

### GENERAL:

The document overall is well written. There are areas of great detail such as the description of the coveralls that are to be used for personnel protection, yet sections of the actual plan seem general and in some case vague.

In general it appears a large potentially contaminated area is trying to be addressed all at once. The contamination at the site has been there for several years. Obtaining the data from soil gas and in-situ soil sampling and then designing the well layout would make more sense than the approach being using.

There is no indications of any other investigations which may have been done, other than Chevron s. Mr. Ted Olsen, RAB member and with the City of San Diego Waste Management Department has stated that he has knowledge of some work done on the nearby Quality Inn and the empty bank properties.

The workplan does not address the potential for contamination from the several existing or previously existing hydraulic lifts at NEX.

No mention is made in the workplan of when the remaining tanks will be removed. They must be removed or upgraded by December 22, 1998. Is it necessary that all the tanks remain in service? Must gasoline be sold at the station? How much do they sell, and is it worthwhile?

NEX is a UST problem, yet CERCLA (not UST) procedures being followed. Who is going to do what to whom? Ideas for NEX UST at variance w/those for sites 2,7, etc. UST's.

Knowing that gasoline contamination exists at the facility, that leaking pipes may have contributed to the problem and that precision tank tests are not foolproof, strong consideration should be given to removing the tanks.

Whatever remedial option is selected, trying to clean up a site with 30 and 40 year old tanks still in operation is not a good idea for these reasons:

1. The tanks are old.
2. The bottom of the tanks are probably in groundwater, making them more susceptible to corrosion.
3. If they have leaked, the backfill and soil surrounding them likely has high concentrations of gasoline which will exacerbate cleanup efforts.
4. Spills from ale! deliveries will likely continu.
5. Most tank precision tests by their nature test to a standard of 0.01 gallon per hour allowable leak rate. So even if a tank tests tight, it may still be leaking.
6. Experience has shown that even tanks that pass precision tests may leak.

**THE RAB RECOMMENDS THAT THE DECISION TO LEAVE THE OLD TANKS IN THE GROUND BE REVISITED AND THE TANKS BE REMOVED.**

**SPECIFIC COMMENTS:**

Page	Comment
Cover page	Does not mention NEX Gas Station in Title.
v	Acronyms and Abbreviations list does not include CTR, STI.C, TTI.C, and TCI.FN all of which are used extensively on Page B3-1. These should be included.
1-1	Section 1.1 The transition between the ESA and remedial action seems abrupt. Where is the selection process described? The objective should be mentioned in the Work Plan title.  ESA and TS or ESA, w/TS to follow or what? What is promised? When?
1-3,	Figure 1-1 Arrow to SITE does not refer to Site 3 at Nimitz and Rosecrans. This Vicinity Map should be revised so the arrow does indeed point to the site in question.
1-7	Section 1-3, para 4 : The waste oil tank was removed in May, 1994. Had the tank leaked? what were results of soil samples taken upon removal? Was an Unauthorized Release Case opened? Information should be provided about the waste oil tank removal.  What is "its in the next to last line ?
1.11	para 2: What was done with the sludge?
1-12	Section 1.4.1, para 1: Describe piping integrity tests. How do tank level monitors and line leak detectors work? When were they installed? What are the results? Integrity testing of USTs was done in February, 1990. Leaks in failed piping were not tested for leaks until May, 1992. Why such a long delay?  Section 1.4.1, para 2: Tank level monitors cannot detect very small leaks, or prevent overspilling during product delivery.
1-12	Section 1.4.2 para 2: Results should be mentioned separately from procedures.
1-15	Table 1-2 Are these concentrations significant? Table 1.2 shows <3,000,000 ug/l and <1,500,000 ug/l of discl, what does this mean? An appreciable amount of stoddard solvent is shown in MW-2 and MW-4, no mention is made in text of this. Where could the stoddard solvent have come from, the waste oil tank, the separator?  For MW-1, MW-2 and MW-4 TPH (gasoline) is shown in soil samples at less than method detection limits, how is this possible?
1-16	Section 1.4.3, para. 1: The wells should be checked at least quarterly for phase-separated hydrocarbons (PSH), and any appreciable amounts of PSH should be bailed Why were the wells not monitored per SAM guidelines?

Page	Comment
1-16	Section 1.4.4, para. 2: "... gas samples were collected at 4.5 to 6 feet below grade...", yet Section 2.3 says groundwater is at 11.1 feet to 14.8 feet below grade. Should try to get samples closer to water table.
1-17	Table 1-3a is confusing. Are the detection limits variable? What does 6U or 2.3U mean?
1-18	Section 1.5, Table 1-3b: The units (ppb) differ from those in Table 1.3. Is there a conversion? The table is confusing also. Was stoddard solvent detected?
1-19	Section 1.5, para 1: The possibility of the Chevron Gas Station's impact on NEX should be more thoroughly evaluated. The TPH detected in HP-8 cries out for a more in-depth assessment of the effects of Chevron's leak on NEX gas station. There is an extremely high possibility that co-mingling of contaminants has occurred. The problem at NEX may not be solely the Navy's.  Section 1.5, para. 3, line 6: "...closure may be obtained using cleanup levels justified by a health-based risk assessment." By whom and using what paradigms of risk will these levels be set? A discussion of the exact evaluatory process for determining cleanup levels should be added and the responsible agency named.
1-20	last para, line 1: Expand on suggestion that plume affected NEX site!
2-2	Section 2.4, para. 1 : It is very unlikely that groundwater at NEX is tidally influenced. It's too far from the bay.
2.3	Figure 2.1: What is reference level for ground water elevation.
3-1	Section 3.1.3, para 1, line 4: City should be capitalized in City of San Diego.
3-3	Section 3.2.1, para. 1, bullet 1: "...groundwater extraction...", especially in non-beneficial groundwater use area, is questionable. RAB suggest explore an alternative.  Section 3.2.1, para 2: How are samples to be selected for all of these tests? All these tests can run into a lot of money. Samples should be selected wisely, i.e., distinct soil types.  As stated previously, soil samples should have been taken when the waste oil tank was removed, and analyzed for heavy metals, TRPH and PCB's at that time.
3-4	Para 2: Reading would be easier if a reference were given here to FSP as Attachment A.  Para. 4, line 3: "The data generated will be used to propose appropriate on-site cleanup levels for BTEX based on human-health and ecological risk factors." By whom and using what paradigms of risk will these levels be set? A discussion of the exact evaluatory process for determining cleanup levels should be added and the responsible agency named.  Para 5: Paragraph is repeated.

Page	Comment
3-5	<p>Section 3.2.2.1, para 2, "Soil-Gas and In Situ..." It would make more sense to do the soil-gas and in-situ groundwater sampling before selecting the locations for borings and monitoring wells and before design. This is a large and seemingly comprehensive workplan. But it appears they are trying to design it all at once. Take the pieces one at a time before installing all 14 borings.</p> <p>Other people have done assessment work (soil, gas, etc.) at nearby locations, What have they found? If others have done work get their information, no need to duplicate work. Soil gas surveys have recently been done across Nimitz Blvd. from NEX.</p>
3-5	Section 3.2.2.1, para 4, " Subsurface Soil ..." Do not use 5 foot intervals blindly. Sample in vadose zone above groundwater where contamination is likely to be found.
3-6	<p>para. 1 "Groundwater Monitoring Well..." Which well will be used as an extraction well? Only 3 wells for vapor extraction? The number of wells to be potentially used for vapor extraction should be closely analyzed.</p> <p>Use Emco - Wheaton traffic boxes. They hold up very well.</p> <p>What is time interval between groundwater monitoring episodes. Quarterly monitoring should be instituted to develop a good historical base of groundwater conditions</p>
3-7	Section 3.2.2.2: There appears to be a lot of duplication in the soil and groundwater analyzes. If all these tests are being done in the soil, why so many in water, and vice versa?
3-8	Section 3.2.2.5: What will be availability of SSA report?
3-9	<p>Section 3.2.3.2, para. 2: Before saying that influent and effluent samples will be analyzed for these several parameters, -wouldn't it be good to select the remedial option and base the analyses on the method selected?</p> <p>It sounds here in Section 3.2.3 like some sort of groundwater pump and treat remedial option is anticipated. Let's not put the cart before the horse.</p>
A3-1	Section 3.2, line 8: Again, sampling only at 5 foot intervals may overlook areas of highest contamination. Sample in vadose zone.
A3-2	Section 3.3.2; What is time interval between sample episodes?
A3-5	<p>top page : Well MW-10; Was waste oil tank a leaker? What about soil samples taken at tank removal?</p> <p>para 3, bullet 4: Well MW-15; Why install MW-15 and MW-19? Evaluate soil gas and in-situ soil samples before selecting well locations.</p>
A3-5	Section 3.5, para 1 bullets 5 & 6: What is meaning of "matrix"? of "spike"?

Page	Comment
A4-1	<p>Section 4.1: Why analyze samples on a quick turnaround time basis, for twice or more the price? Will five days make that much difference?</p> <p>Section 4.2: One sample per soil type.</p> <p>Section 4.3.1: Again why a quick turnaround?</p>
A4-2	<p>Why analyze twice for BOD, TOC, COD, heterotrophic plate count, hydrocarbon-oxidizing population, and iron-bacteria population? Again it appears that a remedial option is being evaluated before one is selected (if bioremediation).</p>
A5-5	<p>Section 5.4.3: This is not a good protocol to use in taking water level measurements. The first step should be to use an oil-water interface probe to determine depth to PSH (if any) and depth to water. If no PSH is detected, then use a bailer to see if a sheen is present.</p> <p>Determining depth of the well should be done after water/product level measurements are made, because disturbing the liquid surface will affect the measurements, especially if a thin layer of PSH is present. Sending a bailer or a weighted steel tape down will disturb the well contents causing the readings to be inaccurate.</p>
B4-4	<p>Section 4.3.2.2, para. 1, line 3: "If the water does not meet the permit requirements for discharge, the water will either be treated on-site and discharged or transported off-site to a treatment facility." This sort of "plan" is used repeatedly in the document. Have off site treatment facilities been alerted and engaged? Is there a plan for and an agency chosen to transport the hazardous waste to such a facility? There are concrete, exact descriptions of how hazardous products of all sorts are to be collected and stored on site, but the document goes vague about transport to and remediation off-site.</p>
C3-3	<p>Table C3-1: Define tolerance limit. Accuracy? Precision? Both?</p>
B5-1	<p>Section 5.1.2: Point of information about the designation "Inert/Nonhazardous" here and throughout the document; Does this specifically exclude Designated waste? Since it is not planned to test or track the disposal of Inert/Nonhazardous waste, it is important to be clear that Designated Waste is not included. Designated Waste (see 3.2.2) is categorized as Nonhazardous in California law and yet has the potential for degrading water quality.</p>