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NASA CROWS LANDING

PUBLIC MEETING

June 23, 1999

Sites 10, 12, 13, 14, 16, and 18

Proposed Plan

Reported by:

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Taken at:

CITY COUNCIL CHAMBERS

48 North Salado

Patterson, California

1 MS. WINTER: This is the NASA Crows
2 Landing public meeting to discuss the
3 environmental investigations at six sites out of
4 Crows Landing and then the no-further-action
5 recommendation for the six sites.
6 We'll be covering seven topics tonight --
7 the introduction; then we'll describe the cleanup
8 process generally; then we'll get into the
9 specifics of each of the six sites and we will
10 discuss their operational history; the
11 environmental investigations that took place at
12 those sites and the results of those
13 investigations; then we'll discuss how the risks
14 to human health were evaluated and sum up with why
15 we're choosing no further action at these
16 particular sites; then we'll discuss the role of
17 NASA and the state and the county at Crows
18 Landing; and then open it up for questions and
19 answers.
20 I'll introduce myself. I'm Brooke Winter.
21 I work with Tetra Tech, which is a consultant to
22 the Navy. We help the Navy conduct the
23 environmental investigations and then come up with
24 cleanup solutions.
25 And now I'd like to turn the meeting over to

1 Hubert Chan, the Navy project manager for the
2 investigation and cleanup.
3 MR. CHAN: Thanks, Brooke.
4 Hi. It is kind of difficult to see you.
5 Thanks for coming out tonight. My name is Hubert
6 Chan. I'm one of actually two project managers
7 that work for the Navy responsible for
8 investigation and cleanup at Crows Landing.
9 Tonight I'd like to introduce to you some of
10 the folks involved in the cleanup along with
11 providing you with a very brief briefing of our
12 cleanup process that we follow at Crows Landing.
13 As most of you know, the Navy was a tenant
14 and a resident at Crows Landing for a number of
15 years. However, in 1993, as part of the base
16 closure process, the Navy transferred Crows
17 Landing over to NASA. However, the Navy retained
18 responsibility for investigation and cleanup
19 associated -- with contamination associated with
20 our past practices there.
21 As you know, the cleanup of Crows Landing is
22 a team effort, and some of the folks involved with
23 that cleanup are here. I want to go ahead and
24 point out some of the folks to you right now.
25 As Brooke said earlier, Tetra Tech

1 Environmental, Incorporated, is the Navy's lead
2 consultant at Crows Landing. They're the folks
3 who are responsible for the day-to-day management
4 of our cleanup process. They do the planning.
5 They do the actual fieldwork, the reports. They
6 work with us, and they're regulators in ensuring
7 our fast and efficient cleanup at this facility.
8 Our lead consultant on this project is Keith
9 Reamer.
10 Did you want to say a little bit about what
11 you do for us, Keith?
12 MR. REAMER: Just basically what he
13 was saying. We are in charge of all the
14 environmental investigations out there. It's my
15 company that contracts the driller contracts, all
16 the subcontractors that collect our environmental
17 samples out at the site, and basically determine
18 where and what the contamination is at the base
19 and how we're going to go about cleaning it up.
20 MR. CHAN: Okay. And you have met
21 Brooke. She does a lot of community relations,
22 including the Fact Sheets that you will receive
23 from the Navy. She also was responsible for the
24 ads and so forth that were put out.
25 As a part of our cleanup, we have regulatory

1 oversight from the county as well as the State of
2 California. There are two state agencies here
3 tonight who provide oversight of our cleanup
4 process. One is from the Department of Toxic
5 Substance Control. We have Francesca D- --
6 MS. D'ONOFRIO: D'Onofrio.
7 MR. CHAN: -- D'Onofrio. Thank you.
8 And from the Regional Water Control Board, we have
9 Robert Reeves. And we also have from the Water
10 Board Carrie --
11 MS. ROMINE: Romine.
12 MR. CHAN: -- Romine. Thank you.
13 And as I said to you earlier, NASA now is
14 the property owner of Crows Landing, and
15 representing NASA is Brian Staab.
16 MR. STAAB: Hello. Nice to meet you.
17 MR. CHAN: The last key player I want
18 you to meet is one of my best friends and probably
19 my biggest critic, I know, the project manager on
20 the Navy team, Don Chuck. He will come up later
21 to give a presentation of all the sites that we're
22 proposing no further action for tonight.
23 I also want to give you perhaps a very brief
24 background of the cleanup process itself. And if
25 I may, I'll use this slide as well as that one. I

1 like this one because it has nicer pictures on
2 it. At least I think so.
3 Typically what we do with the site is --
4 either through interviews or investigations at the
5 base, a site becomes a suspected area where
6 contamination could occur. Again, through
7 interviews or through investigation of our other
8 sites, the first step we take is kind of a short,
9 brief investigation of whether there is
10 contamination at the site or not. And this
11 particular step is sometimes known as a site
12 investigation, a preliminary assessment, a
13 snapshot of whether there's contamination there or
14 not.
15 And the scope of our investigation would be
16 just geared to find out "yes" or "no." If it's a
17 "no," obviously we don't do any more with the
18 site. It gets kicked out of our program. If it
19 is a "yes," then it goes on to the next step.
20 The next step is yet another level of
21 investigation. This time, since we know there's
22 contamination at the site, what we try to do is we
23 try to define the contamination laterally as well
24 as vertically, and also we try to make a
25 determination on whether we need to do a cleanup

1 right away.

2 If it's life-threatening, something that is

3 urgent in nature, then we would go through a

4 cleanup immediately at that point based on the

5 information that we have. If it is not, it moves

6 on to another step.

7 At this step what we try to do is evaluate

8 what type of cleanup is best for this site; so we

9 do a study on all the technologies available and

10 narrow it down to a few that are appropriate and

11 ultimately decide on a remedy for that site.

12 In each one of these decision points, we

13 either do a cleanup if we find that the site

14 requires so, and also we're required by law

15 regulations, guidances, to also contact a

16 community and get input from you folks. And

17 tonight is another one of those steps that we're

18 taking.

19 I think with that, I'd like to hand this off

20 to Don who is going to come up and give you a

21 briefing on the sites that we're proposing for no

22 further action. Thanks.

23 MR. CHUCK: Good evening. Hubert said

24 we have six sites here that we want to go through

25 in this process tonight, and there are six sites

1 that we have determined that no further action is
2 required. And to kind of show you how we came to
3 that decision, we're going to have a brief
4 discussion of all these sites. I'll start with
5 Site 10. Let's get a picture of it here.
6 I think before I get too far into the sites,
7 you might wonder why we start with Site 10. There
8 are no Sites 1 through 9 at Crows Landing. The
9 original study, which was the preliminary
10 assessment that Hubert referred to, was done by
11 the Navy who called it an initial assessment
12 study. And under that study of not only Crows
13 Landing, but the naval station at Moffett Field,
14 which Hubert and I are responsible for cleanup,
15 are the sites at Moffett Field. We started at
16 Crows Landing the sites as Sites 10 through 14,
17 and then during our investigations we added
18 several other sites.
19 Site 10 was originally described as a rubble
20 disposal area, which was located off the end of
21 the runway right about in this area, and was
22 probably operated within the early '50's. It was
23 a site that had been described as a place to
24 deposit some rubble-like wood, debris, and that
25 type of stuff, to burn in pits. Later on there

1 was another site or pile of debris out there when
2 I started work that was mostly concrete rubble
3 that had been moved off.
4 The initial assessment study evaluated the
5 site and determined there were no contaminants at
6 the site, and at that time they believed it didn't
7 warrant any further study. And the EPA, when they
8 did their initial letter for us, said, "We are not
9 concerned with this site, either." However, there
10 were some questions of what was really -- the data
11 was a bit sketchy; so at the request of the Water
12 Board, we agreed to install some excavations
13 across the site to look for evidence of these burn
14 pits.
15 The excavations were done. We found
16 nothing. We examined the site with a flame
17 ionizing detector, which is a way to look for
18 contaminants. There was nothing there; so we
19 determined that there was nothing to be concerned
20 about. So the proposed plan for this site would
21 be no further action.
22 The next site we're going to discuss tonight
23 is Site 12. Site 12 is an auto maintenance shop
24 area. This is the auto maintenance shop. And the
25 main concern was a concrete pad along the side

1 where they used to clean car parts with solvents.
2 And the concern was, of course, solvents would
3 have gotten into the ground.
4 There was a drain at the site that appeared
5 to drain just into the ground. So we did an
6 initial assessment, a site investigation, and we
7 did find -- I will add to it, there was another
8 site located near here which was a pesticide area
9 for mixing pesticides and rinsing out the tanks.
10 It had been called Site 15, but because it was
11 close to Site 12, we combined it together and
12 combined the investigation.
13 During our site assessment, we didn't find
14 any solvents in the soil or groundwater. We did
15 find some petroleum hydrocarbons and associated
16 compounds we called BTEX, toluene, benzene, and
17 xylene at low levels, but it warranted further
18 investigation. No pesticides were found. So we
19 further investigated the site.
20 We excavated out the pad and excavated the
21 soil below. And during that excavation, we
22 located a large -- not a large area, but an area
23 of high contamination that was obviously a fuel
24 contamination site associated with a former
25 underground storage tank that was there.

1 We carried on that excavation, removed the
2 materials, sent it out to the appropriate
3 landfill, and took soil samples. And after we
4 were done, we had removed all the contaminants
5 from the site. Therefore, our proposed plan for
6 this site also is no further action.
7 The next site for tonight is Site 13.
8 Site 13 is known as a TACAN site. I don't recall
9 what "TACAN" stands for. It's essentially a
10 navigation lead. This antenna sends out a signal
11 to tell airplanes which direction to fly to find
12 the field at Crows Landing. And at the site,
13 which unfortunately is not on this picture but off
14 to the side, was a transformer pad to feed the
15 electrical power to this site.
16 In the early '50's there was a fire at this
17 site causing some spillage of transformer oil
18 which may have had PCB's in it. And during the
19 reconstruction of that site and then enlarging the
20 pad, soil samples were taken and, indeed, they did
21 find low levels of PCB's. So we conducted a site
22 investigation to determine the levels of PCB's and
23 what else might be there and involved four soil
24 borings under the pad.
25 We didn't find any PCB's, but we did find

1 the pesticide toxaphene in one site that was of
2 somewhat elevated levels. So we carried that up
3 to our remedial investigation, which is on the
4 next slide.
5 During the remedial investigation, we did
6 further samplings to determine the amount of
7 toxaphene and did a water quality assessment to be
8 sure none of these contaminants are affecting the
9 groundwater. The investigation's results were,
10 indeed, that the toxaphene was of low levels to
11 not affect the groundwater. We did find some DDE
12 and DDT. Those, again, were not a danger to the
13 groundwater. And all the pesticides were similar
14 for the background of the farm fields in there.
15 It's right in the middle of an agricultural area;
16 so we expected to find pesticides.
17 After further study, we deemed this site not
18 worth any more work; so we want to declare this
19 one also a no-further-action site.
20 Site 14 was a fire fighting training
21 facility that was used throughout the years at the
22 base. Essentially what this involved is they had
23 a pit dug in the ground. They would put excess
24 fuel in it, contaminated fuel, oil, some solvents,
25 and then light it on fire and see if they could

1 put it out.

2 At one time the Navy had decided they were
3 going to install a permanent fixture here, and to
4 do that, we needed to get rid of the contaminated
5 soil. We didn't do an initial investigation but
6 actually went out to the site, excavated the soil,
7 and treated it with what's called a low
8 temperature thermal treatment technology.

9 Essentially the soil was excavated and run
10 through the machine that heats the soil up which
11 causes the contaminants to be vaporized, and those
12 were treated with a vapor-phase carbon, and the
13 soil was cleaned up. Then we backfilled the site
14 with clean soil and some of the soil we treated.
15 The remainder of the treated soil was stockpiled
16 on the site. In fact, it's still out there.

17 After that was done, there was some concern
18 of whether or not there were any dioxins or furans
19 in the soil and what the metal levels were. So we
20 went to the stockpiles, took some samples there,
21 and found that there were minor detections of
22 dioxins, no furans. And the metals were
23 background levels; so they were no different than
24 the other sites. So we had no problem with the
25 soils there.

1 There were still some concerns with the
2 groundwater. So at the request of the Water
3 Board, we went out and did what's called
4 HydroPunch, which is a process where you take a
5 rig -- I was going to say CPT. It's a cone
6 penetrometer test rig where you pushed down a
7 probe into the soil when you get into the
8 groundwater. You can open up this probe and take
9 a water sample and send it off for analysis. And
10 the analysis showed we had no detections of
11 dioxins, furans, et cetera. So the site,
12 therefore, we're pretty confident is clean, and so
13 we're proposing no further action at Site 14.
14 Site 16 was a pesticide mixing area. It was
15 located right in here. There was a faucet and a
16 pad where they would mix the pesticides in the
17 tank and some herbicides, go out and spray the
18 pesticides and the herbicides at the base, and
19 come and rinse the tank off here.
20 Our initial site investigation was to
21 install some soil borings and samples of soil. We
22 did not find much in the way of the pesticides --
23 I don't think we found any pesticides at all --
24 but there were high levels of arsenic elevated way
25 above what we needed to keep there.

1 So for remedial investigation, we went out
2 to the site. We had to move -- what's going on
3 here is we had to move some of the water treatment
4 system. This is tank for the water supply on the
5 base, and there is a pressure tank for that water
6 system. And then we excavated to two feet below
7 the surface to investigate the extent of the
8 arsenic.
9 After we're done with our excavation, we
10 took samples, measured for arsenic, and found that
11 we had removed all the arsenic. So this site is
12 now clean, and we're proposing it for no further
13 action.
14 Finally, I have Site 18, and this is a
15 portion of Site 18. I should have put up a map so
16 we could have seen all these. Site 18 had two
17 locations. One was an ammunition or a firing
18 range, which is at this portion here, and this is
19 off the end of the runway that they used to bring
20 the plane, park them here. There was a mound that
21 they aimed their guns on the plane and test them
22 out.
23 Another site was back near Little Salado
24 Creek. We called it the live ammunition site.
25 Briefly, at this location our site investigation

1 was to go to the site where old aerial photographs
2 had been taken and we had seen the mound. It's
3 been gone probably since the middle '50's and has
4 been cultivated ever since. But we went out with
5 a metal detector. We found some small arms
6 shells. We found 50 caliber bullets, et ceterea.
7 We did some soil samplings and found -- we
8 were looking mainly for lead, which is the
9 expected metal. We didn't find any elevated
10 concentrations of the metal in general. They were
11 similar to the background metals. And with the
12 fact that the site had been cultivated for quite a
13 few years, we didn't see any further risk at the
14 site; so, therefore, we concluded that this was a
15 candidate for no further action.
16 Now the live ammunition site was off Little
17 Salado Creek toward the south end of the base, and
18 a live 20 millimeter shell was found at one time.
19 And when that -- I can't remember the date when
20 that shell was found. The U.S. Army sent out an
21 Explosive Ordinance Detachment group to explore
22 the site, look for ammunition. It didn't find any
23 except the corroded 20 millimeter shell.
24 So at least -- we believe these 20
25 millimeter shells came from a jet crash in the

1 early '60's. There was an A-4 jet that crashed to
2 the site, and they carried 20 milllimeter shells,
3 and we believe that's the source of that. So we
4 believe there's nothing left to fear. I don't
5 like it because it sounds worse than it is.
6 Therefore, we're proposing no further action
7 there, also.
8 And that's kind of a brief history of the
9 sites. These sites and these pictures don't
10 necessarily -- they give you an orientation. It's
11 not the best of maps. This is the main air
12 field. Highway 33 would be over here. Marshall
13 Road is over here, Ike Crow Road, and this is Bell
14 Road, and I think Fink Road would be over here.
15 Site 10 off the runway is located at this
16 site. Site 12, the auto maintenance site, is over
17 here, which we'll call the admin or administrative
18 part of the base. Site 13, the TACAN site, is
19 right here. Site 14, the fire fighting training
20 site, is located here. Site 16 is located near
21 the fire fighting training area. This is the
22 firing range portion of Site 18. And the live
23 ammunition portion of Site 18 is near the Little
24 Salado Creek. And that gives us a history of the
25 sites.

1 I guess I'll introduce Keith Reamer who will
2 talk about the ecological and human health risk
3 portion.
4 MR. REAMER: Okay. Basically, as part
5 of the remedial investigation process, after we've
6 gone out to these sites and done all of our
7 investigations, put in the bore holes, collected
8 all of our samples, sent them to the lab, got our
9 analyses back from the laboratory, what do we do
10 with it? Basically we do what's called risk
11 assessment. And basically the whole IR process is
12 to provide risk assessment because what it does is
13 evaluates risks to human health, human and
14 ecological receptors, people and bugs and bunnies
15 and things. Basically the risk analysis
16 identifies the contaminants that are there,
17 identifies exposure pathways, human and ecological
18 receptors, and what are the risks associated with
19 contact with the contaminants.
20 After all of our samples were collected
21 early on in the risk analysis process, Sites 10,
22 14, and 16 were eliminated right away, because as
23 you remember as Don was talking about the sites,
24 there were either no contaminants at the site,
25 like Site 10, nothing was found, or that the

1 contaminants had been removed, like Sites 12 and
2 16. The arsenic at Site 16 had been removed, and
3 then Site 14 with all the petroleum contaminant
4 had been removed and destroyed.
5 The remedial analysis -- excuse me. The
6 risk analysis was completed for the remaining
7 sites, Sites 12, 13, and 18, mainly because of the
8 toxaphene found out at Site 13 and some metals
9 that were found at Sites 12 and 18. But as part
10 of the risk analysis process, we use Environmental
11 Project Agency guidelines, and within those
12 guidelines, they have established an acceptable
13 range of risk levels that are acceptable. We're
14 basically either talking about the number of
15 people who may be exposed to those contaminants
16 over a period of 30 years, in Crows Landing's
17 case, because we look at a residence -- they call
18 it a residential-type exposure pathway, and the
19 risks are calculated based on the type of chemical
20 found at the site and the exposure pathway.
21 By "exposure pathway," we mean whatever way
22 you might come in contact with the contaminant,
23 whether it's breathing it in or getting it on your
24 skin, or whatever. And as a result of that
25 investigation, we found that the remaining -- the

1 sites that were carried through the final phase of
2 the risk analysis, Sites 12, 13, 18, were within
3 the range of acceptable risk established by the
4 EPA. The main drivers in the risk were the
5 toxaphene at Site 13, which was also found in our
6 background samples, and the metal beryllium, which
7 was also found in our background sample, which
8 means it's widespread. It's even found in areas
9 outside of the boundaries of influence of the site
10 activities.
11 So basically those were -- anyway, those are
12 the reasons we got the sites eliminated. And
13 that's why you're all here, because these are the
14 sites out of all the other sites -- we have other
15 sites at the base that do require further action.
16 But these sites have been determined the risk is
17 not there, and the proposed plan is for no further
18 action. We invite your comment.
19 By the way, the library contains -- I don't
20 know if you are all aware of this, but the library
21 contains a repository of all the documents that
22 were produced based on all the investigations.
23 And just as a final note, we also do an
24 ecological risk assessment, which is in addition
25 to the human health risk assessment, and the

1 results were pretty much the same as the human
2 health. Sites 10, 14, and 16, obviously, are no
3 risk because the contaminants had been removed or
4 did not exist. Sites 12, 13, and 18, that was
5 eliminated from ecological risk for slightly
6 different reasons. Basically there were no
7 habitats. For example, there was no risk to the
8 animals. Essentially the sites are covered with
9 concrete or Don's been digging them for how many
10 years? There's really no habitat around there; so
11 there's no risk to any animals that are around.
12 And now that I'm done, our slide's back up.
13 MS. WINTER: I'll take it back over.
14 I'd like to let the other people from NASA
15 and some state representatives here explain a
16 little bit what their involvement at Crows Landing
17 is. So I'll start with Brian.
18 MR. STAAB: I'm involved with Crows
19 Landing basically because NASA is the property
20 owner right now. So I am a part of the remedial
21 program management team that is working with the
22 Navy on the cleanup, and we're also involved with
23 transferring the property through the General
24 Services Administration. That's basically my
25 role.

1 Robert?

2 MR. REEVES: I'm Robert Reeves with

3 the Water Board, and I represent more or less

4 concerns related to soil and groundwater cleanup

5 at the sites. We reviewed all the documentation

6 related to the no-further-action sites present

7 today. We are also involved in a lot of the other

8 sites that require remediation. I don't know if

9 maybe we could show a map.

10 Is there another map, maybe, showing some of

11 the sites we're looking at?

12 MS. WINTER: Yes. It's laying down

13 right there.

14 MR. REEVES: It will give you some

15 perspective.

16 Some of the other sites that they're looking

17 at also are in and around these no-further-action

18 sites. They're not really shown on this map here,

19 but some of them are actually in the area where we

20 have contamination. So we're still looking at

21 those.

22 And I think today we're really, at this

23 point, just looking at these areas. They're very

24 limited in scope. So, you know, there's still a

25 lot more work to be done. That's the main thing I

1 want to say about that. We specifically didn't
2 look at the health risk assessment. I think I
3 want to make that point clear. That's the other
4 agency. That would be DTSC.
5 Maybe you can add a few things to that.
6 MS. D'ONOFRIO: I'm Francesca, and I
7 worked in conjunction with the project team. I'm
8 with the Department of Toxic Substance Control.
9 We have a toxicologist who lookes at the risk
10 assessment to determine any level of contamination
11 remaining is not posing a health risk to humans or
12 the environment. And I work with Robert in
13 reviewing all the environmental documents.
14 MR. REEVES: I think the other thing
15 I'd like to say is we do -- the City does concur
16 with the no further action for all these sites. I
17 think that's an important point to make here. And
18 we're really here to answer any questions or
19 concerns that you might have with any of these
20 sites.
21 MS. WINTER: Well, I'd like to open it
22 up for any questions or comments. We do have a
23 recorder present; so if you would, we'd like you
24 to state your name, and then if you've got a
25 question or comment, please ask. Or if you would

1 feel more comfortable, you could write your
2 question or comment down and give it to myself or
3 Hubert, and we will make sure that we respond to
4 you. In the proposed plan, which is that Fact
5 Sheet that we have copies there, is Hubert's
6 address, and if you'd rather send your comments
7 in, you may do that, too.
8 MR. JANTZ: I'm Richard Jantz from
9 Stanislaus County. I wanted to ask the
10 representative from NASA how much of the property
11 do you propose to transfer initially and how much
12 will be transferred later and whether it will be
13 basically in two stages or more than two stages.
14 MR. STAAB: It will be -- at this
15 point we are predicting two stages right now.
16 This is the -- basically what we're proposing is
17 to split the property into two sections along this
18 line. The reason being is all the sites to the
19 west of that line, all that property, is clean,
20 and it can be transferred immediately with the
21 exception of this site here, which will require
22 further action. And all the sites that require
23 additional work, which Robert has pointed out, are
24 in this location in general.
25 So the idea was to make available as much

1 property as possible at this point. And when the
2 remedies are in place for the remainder of the
3 property, that property will be made available, as
4 well.
5 MR. JANTZ: If I may ask a follow-up
6 question: As I understand it, then, the two
7 airstrips along with the property that's now --
8 that's under agriculture will be transferred now
9 or currently, and the structures will transfer
10 some time later.
11 MR. STAAB: As you can see, this
12 runway in its entirety will be transferred.
13 Unfortunately, due to contamination under this
14 roadway -- there's a groundwater plumb right
15 here. This entire runway can't be transferred.
16 The border runs right along here, essentially.
17 That's unfortunate, but that's kind of the way it
18 had to go due to contamination at the site.
19 MR. JANTZ: So what happens to that
20 one runway if you transfer part of it and not all
21 of it?
22 MR. STAAB: That's basically a reusage
23 issue. NASA is not dealing with reusage issues.
24 General Services Administration deals with the
25 reusage.

1 You had a question?

2 MR. ESCOBAR: I was going to ask the

3 same quesiton. Why would you transfer a runway on

4 a bunch of farm land and not transfer a bunch of

5 buildings in another runway?

6 MR. STAAB: You can't transfer land

7 that is contaminated.

8 MR. ESCOBAR: I understand that. I

9 was curious why the boundary's there adding a

10 bunch of farm land and a runway in one big parcel

11 when you have another runway off to the side. I

12 understand it's --

13 MR. STAAB: We wanted to make

14 available as much land as possible as soon as

15 possible, was the idea.

16 MR. ESCOBAR: Okay.

17 MR. STAAB: Any other questions along

18 that line?

19 MR. JANTZ: I have another question,

20 if I may. Is there a way to give input on NASA's

21 position on this? Our concern is that -- and the

22 County does have an interest in the property. Our

23 concern is that if you transfer one runway and

24 part of another runway, there will be

25 encouragement to break up one of the runways, at

1 least, and as a consequence, it will not be in use
2 or will not be available for use in the future
3 when the rest of the property is transferred. So
4 as a consequence, you know, you have -- you have
5 mixed uses there, and you're not transferring the
6 property as to how it's being used. You're
7 transferring it strictly on its cleanup.
8 MR. STAAB: And that's the guidance we
9 have received from GSA.
10 Just to kind of reiterate, if we could --
11 after this question, if we could focus on the
12 no-further-action sites, which is really the
13 intent of this meeting, and then after that, we
14 can follow up on reusage issues. Because that's
15 really the intent of this meeting.
16 There have been plenty of opportunities for
17 input on the whole transfer process. We've
18 included the County on the distribution of the
19 various documents that were prepared for the
20 transfer environmental baseline survey, the
21 Findings of Suitability to Transfer, and the
22 environmental assessment process. So there's been
23 several opportunities for comment on that.
24 And we have just published the environmental
25 assessment and the FOST, so we're moving forward

1 with transferring the program to GSA. That's the
2 guidance we received from GSA, was proceed with
3 transferring as much acreage as you can at this
4 point, and they would deal with the reusage. And
5 I think you have been working with Tom Doskosh
6 (phonetic) on that issue.
7 MR. JANTZ: Yes. Right.
8 MR. STAAB: So if we could -- as I
9 mentioned, if we can, let's proceed with any
10 issues concerning the cleanup. Then after that,
11 we can follow up with any issues of transfer.
12 MR. FOUST: I'm Brian Foust from
13 Modesto, California. Is there a time line on when
14 the cleanup will be completed for the second
15 site?
16 MR. STAAB: I think Don or Hubert --
17 MR. CHUCK: It will vary with the type
18 of remediation we put in. There is -- just a
19 little background. The one site has a carbon
20 tetrachloride plumb as a result of past practice.
21 Site 17 --
22 Brian, why don't you put your map up.
23 That's pretty good.
24 MR. STAAB: Okay.
25 MR. CHUCK: Site 17 was a location of

1 two hangars. The history of Crows Landing, for
2 those who don't know, the base was built in 1942
3 to support training of the Navy patrol boomers
4 during World War II. When they built the original
5 base, there were two hangars located in this area
6 and a maintenance shed, and we believe that's the
7 source of contamination. That's carbon
8 tetrachloride. A plumb covers generally this area
9 here.
10 Along with that plumb, there were three --
11 next major contaminants are fuel products. There
12 was a fuel farm located right here. We call it
13 Cluster 1. There were three 50-gallon fuel tanks
14 and three smaller tanks that were used for
15 disposal of contaminated fuel. Over the years,
16 fuel leaked out of the tanks. There was a
17 practice of discharging contaminated water from
18 the bottom of the tanks into what's called dry
19 wells, which are nothing more than cobble-filled
20 pits. And unfortunately that turned out to be a
21 very bad practice. It got fuel all over the
22 place.
23 The other side is a fuel farm out here,
24 which we call Cluster 2. There's very little
25 contamination here, but enough to warrant

1 cleanup. In fact, we're constructing cleanup out
2 there right now, a cleanup system.
3 And the last site is -- we call Site 117,
4 located right here, which is a gasoline tank for
5 the Navy Exchange gas station. It leaked over
6 time; so we have gasoline in the soil. So the
7 technologies we use will depend on the type of --
8 for the carbon tetrachloride pluming, anywhere
9 from three years, if we use one sort of
10 technology -- and these are very rough estimates --
11 to as much as 15 years, depending on
12 technologies. The fuel sites could be at least
13 that long, also.
14 After that, we're not exactly sure until we
15 get the right -- we do our final design, put the
16 systems in, and then watch how they operate. Then
17 it will give us a better idea whether it will take
18 longer, shorter, and whether we're going to clean
19 it up very efficiently at all.
20 MR. STAAB: One thing I'd like to
21 emphasize is the sites don't have to be fully
22 cleaned before the transfer. Basically the
23 remedies have to be in place and have demonstrated
24 to be operating properly. So the sites don't have
25 to be entirely clean.

1 MR. REAMER: Just to add on that a
2 little bit, we do have one more step. Hubert was
3 talking about the steps that we take in the
4 remedial investigation process. One of the steps
5 is what we call an FS, Feasibility Study, and
6 actually evaluate all the technologies that were
7 proposed to clean up the site. And it's a pretty
8 lengthy process because we evaluate several
9 different remedial technologies based on criteria,
10 a list this long. As Don said, as it stands now,
11 we have new design information to include in the
12 feasibility study we've already produced, but the
13 study, as it stands now, depending on many
14 technologies, ranges anywhere from 2 to 15 years.
15 MR. CHAN: The short answer would be
16 pending funding constraints. We hope to have our
17 treatment system in place by next summer. That's
18 our goal.
19 MR. CHUCK: We will start construction
20 next summer. Hopefully the construction process
21 will get us done by fall.
22 MR. CHAN: Right.
23 MR. REAMER: One of the processes
24 scheduled for construction is going on now.
25 MR. CHUCK: That is the Cluster 2

1 site.

2 MR. REAMER: That's the one site where

3 we are conducting a remedial system. As we speak,

4 they are probably down there -- not now, but

5 today, they're down there building that system at

6 Cluster 2, and that will -- that's a system that

7 will probably take just under a year.

8 MR. CHUCK: About a year or two years

9 to clean up that site.

10 MR. FOUST: What benchmark needs to be

11 met before transfer can be -- transfer of property

12 can be conducted to GSA?

13 MR. CHUCK: As Brian mentioned, once

14 the remedies are in place and proven to be working

15 efficiently, we can show we're reducing contamination,

16 then we can transfer it along. We don't have to

17 go all the way through cleanup to transfer the

18 site.

19 MR. STAAB: I know this is an area --

20 I understand that term is a qualitative term where

21 the state -- they're going to probably have some

22 input.

23 MR. CHAN: When they feel that the

24 system is in place and proven to be reducing the

25 contamination or eliminating them. I think the

1 important point is to know you don't have to wait,
2 assuming it's going to take 15 years, to do the
3 cleanup. You don't have to wait that long. Even
4 though the transfer would occur, there's still
5 O & M, and there's people continuing tests to make
6 sure cleanup is happening.
7 MRS. ESCOBAR: I was just wondering if
8 it's half a business cycle? A business cycle?
9 About how long?
10 MR. REEVES: It depends on the type of
11 remediation they put it. It depends on -- it
12 could range anywhere from three months to a year
13 until we know if it's effective or not. And this
14 is really an artifact of what the federal
15 government requires, as well. It's not just the
16 state that requires it. It's what they call
17 operational functional determination where they
18 basically want to see, for instance, in a
19 situation where they're extracting water out of
20 the ground and, you know, attempting to clean up
21 the groundwater, in that matter we have to
22 essentially determine if they're cleaning up the
23 entire groundwater plumb or not, and that could
24 take anywhere from six months to a year until we
25 really know that.

1 But, you know, I think there's a lot of
2 flexibility in terms of some of the criteria that
3 we need to have to establish that. I think the
4 concern here is, "Okay. Would it take 15 years to
5 transfer a facility or the rest of the facility?"
6 And by all means, it wouldn't. I think we're
7 looking at a few years, not 15 years, to get the
8 remaining portions of the facility transferred.
9 MRS. ESCOBAR: Who maintains it after
10 it's transferred?
11 MR. CHUCK: The Navy.
12 MRS. ESCOBAR: Do they still got to
13 clean --
14 MR. CHUCK: The Navy is responsible
15 for cleanup after we met our goals.
16 MRS. ESCOBAR: After your goals are
17 met, it's partially done.
18 MR. CHUCK: We're responsible to
19 maintain the system until we've met our clean-up
20 goals. So we would work with whoever the new
21 owner is to have access to the site to maintain
22 our treatment systems. They will be in place. We
23 are not done with the site until we've met our
24 regulatory requirements.
25 MRS. ESCOBAR: I'm saying financially,

1 who maintains it after that, after you're done
2 with your --
3 MR. CHUCK: After our cleanup is done,
4 we've met our requirements, we take our stuff out
5 and go away, and we're done with it.
6 MRS. ESCOBAR: But if there's still
7 stuff that has to be done after you've cleared it
8 to a point where you go on and it's not a major
9 contamination -- I mean, I think that's what I'm
10 hearing.
11 MR. CHUCK: I think if there's --
12 MR. CHAN: The confusion is maybe --
13 we're saying we can transfer once the remediation
14 is in place and operating correctly.
15 MRS. ESCOBAR: Uh-huh.
16 MR. CHAN: That's just a criteria to
17 allow transfer of the site. We still will
18 maintain that system, whatever, of the transfer
19 until we're done cleaning up the site. So when
20 this carbon tetrachloride plumb is done, we've
21 done. While it's still here, the Navy is still
22 there taking care of it. We're paying for it.
23 MR. STAAB: The other thing to
24 recognize is there will be restrictions placed on
25 the property. Both the property that's being made

1 available immediately -- for example, we're not
2 going -- there will be restrictions that wouldn't
3 allow you to come in and put a production well
4 right here because there's a groundwater
5 contamination right there. We can't have wells
6 being installed that would bring the contamination
7 into other areas that aren't contaminated now.
8 So there are restrictions placed as well as
9 restrictions to allow Navy access to do their
10 work, do the cleanup. So the same thing would
11 happen here. If they put their remedies in place
12 and they have remedial systems in place, they need
13 to be allowed access to those areas to do the
14 maintenance and do the sampling and that kind of
15 stuff. So there's restrictions on the site for
16 quite a while. Even though it will be
17 transferred, it will be part of the deed's
18 transfer.
19 MR. CHUCK: Any more questions?
20 Comments?
21 MS. WINTER: I'd like to thank
22 everybody for coming tonight. And if you could,
23 sign in. There's a sign-in sheet for those of you
24 who haven't. Maybe we can add you to the mailing
25 list, and in the future, you can get Fact Sheets

that are produced for Crows Landing. Thanks again.

(Time noted: 7:50 P.M.)

STATE OF CALIFORNIA,)

)

COUNTY OF STANISLAUS.)

I, RENEE L. TERRY, a Certified Shorthand Reporter of the State of California, do hereby certify:

That on June 23, 1999, at the hour of 7:00 o'clock P.M., thereof, I took down in shorthand notes the said testimony and the proceedings had at the time of the giving of such testimony; that I thereafter transcribed my shorthand notes of such testimony by computer-aided transcription, the above foregoing being a full, true, and correct transcript of all proceedings had and testimony given.

_____

RENEE L. TERRY, CSR #7321

Certified Shorthand Reporter