MARE ISLAND NAVAL SHIPYARD
RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES
HELD THURSDAY, DECEMBER 02, 2004

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, December 02, 2004, at the Mare Island Marketing Center in Vallejo, California. The meeting started at 7:10 p.m. and adjourned at 9:18 p.m. These minutes summarize the discussions and presentations from the RAB Meeting. The following persons were in attendance during this month's RAB meeting.

RAB Members in attendance:

- Myrna Hayes (Community Co-Chair)
- Kenn Browne (Community Member)
- Adam Chavez (Community Member)
- Jerry Karr (Community Member)
- Diana Krevsky (Community Member)
- Lea Loizos (Community Member)
- Jim O'Loughlin (Community Member)
- Paula Tygielski (Community Member)
- Carolyn d'Almeida (U.S. EPA)
- John Lucey (U.S. EPA)
- Ray Leftwich (City of Vallejo)
- Jerry Dunaway (Navy Co-Chair)
- David Godsey (Navy)
- Gary Riley (San Francisco RWQCB)
- John Kaiser (San Francisco RWQCB)
- Alan Freidman (San Francisco RWQCB)
- Henry Chui (DTSC)
- Chip Gribble (DTSC)
- Sheila Roebuck (Lennar Mare Island)
- Steve Farley (Lennar Mare Island)
- Dwight Gemar (Weston Solutions)
- Cris Jesperson (Weston Solutions)

Community Guests in attendance:

- Diji Christian
- Christy Smith
- Caitlin Gorman
- Mark Kleinfer

RAB Support from CDM:

- Regina Clifford
- Wally Neville

I. WELCOME AND INTRODUCTIONS

Mr. Jerry Dunaway, RAB Community Co-Chair and Navy Base Realignment and Closure (BRAC) Environmental Coordinator (BEC) for former MINSY, opened the meeting by welcoming everyone and asking for self-introductions.

Attendees introduced themselves as requested.

II. PRESENTATION: Overview of Investigation Area H1 (Landfill) Draft Feasibility Study (Mr. Dwight Gemar, Weston Solutions)

A handout of the presentation was provided and was referenced to throughout the presentation.

Mr. Dunaway stated that there has been a change in the Agenda; Dr. Rhea Williamson and Dr. June Oberdorfer could not make the RAB meeting to present their comments on the Draft Final Remedial Investigation (RI) for the Landfill Investigation Area (IA) H1. The presentation of their technical review comments will be rescheduled for the March 3, 2004 RAB meeting. During that RAB meeting they will also present their technical comments on the Draft Feasibility Study (FS) for the Landfill IA H1.

Mr. Dunaway stated that tonight's presentation will include an overview of the Draft FS for the Landfill IA H1. The FS is the next step after the RI and presents reasonable remedies that are available for the landfill and presents a preferred alternative. The FS is open to comment and any questions will be addressed during the presentation. Mr. Dunaway introduced Dwight Gemar, from Weston Solutions, who will present the overview of the FS.

Mr. Gemar began the presentation by summarizing that the objective of the FS is to development remedial action alternatives for the site, evaluate the remedial action alternatives using nine specified criteria, and to select and present the preferred alternative. The nine criteria used to evaluate the remedial action alternatives were listed on the presentation slide. The first two criteria, which are (1) overall protection of human health and the environment and (2) compliance with applicable and relevant and appropriate requirements (ARARs), are considered "threshold criteria." This means the alternative must at least meet these two criteria. The next five criteria are considered balancing criteria and include (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; and (7) cost. The last two criteria, which are (8) state acceptance and (9) community acceptance, are considered modifying criteria meaning they can override the other seven criteria.

Mr. Gemar stated that the FS document is organized into three sections based on the three main areas at IA H1 including the Containment Area, the Upland Areas Outside the Containment Area, and the Non-tidal Wetland Areas Outside the Containment Area. A figure was shown that identifies these areas (see slide 4 in the handout). Mr. Gemar pointed out the boundary of the containment area (the slurry wall).

Mr. Gemar stated that for the Containment Area, three alternatives were evaluated including no action (Alternative 1); a multi-layer cap, institutional controls, groundwater containment, and landfill gas monitoring (Alternative 2); and complete removal of the landfill contents and disposal offsite (Alternative 3).

Mr. Gemar indicated he will not present Alternative 1 since it is not a viable option for the landfill. Alternative 2 is containment and includes and interim remedy that is already in place and an additional remedy, which is a multi-layer cap within the containment area. The interim remedy was completed in October 2004 and included the installation of 7,300 linear feet of

slurry wall that encircles the containment area and a groundwater extraction/collection system. Extracted groundwater is discharged to the Vallejo Sanitary and Flood Control treatment facility.

Mr. Gemar stated that the additional remedy would be the installation of a multilayer cap that covers the entire area within the containment area, which is approximately 70 acres. This acreage includes about 7 acres of disposal areas that are seasonal wetlands including Wetland X and two smaller areas. These wetlands would need to be replaced. Although the wetlands are isolated and considered low value wetlands, they do contain some pickleweed that may provide habitat for the salt marsh harvest mouse, which is an endangered species.

Mr. Gemar showed a cross-section of the proposed Resource Conservation and Recovery Act (RCRA) liner on a presentation slide (see slide 7 in the presentation handout). Mr. Gemar pointed out that this type of liner would be used on the RCRA portions of the landfill, which must be handled differently than other portions of the landfill. The layers of the RCRA liner (from bottom to top) include the existing debris within the landfill; a two foot foundation layer of roughly graded material; a geonent fabric overlain with a geosynthetic clay liner (a bentonite clay layer); a layer of 60 millimeter polyethylene flexible membrane; another layer of geonet fabric for drainage; and an 18-inch layer including topsoil cover and an erosion resistant cover (see slide 7 in the presentation handout). This is a multi-layer cap designed to prevent infiltration of rainwater into the waste, which will prevent leaching of the waste into the groundwater.

A cross-section of the Non-RCRA Liner was presented. This liner includes the existing site material, a two-foot rough graded foundation layer, a 60 millimeter polyethylene flexible membrane liner, a geonet fabric layer for drainage, and 18-inches of topsoil cover and an erosion resistant cover (see slide 8 in the presentation handout). The purpose of this cap is also to prevent water from infiltrating into the landfill.

Mr. Gemar stated that one of the complications of implementing the landfill cap is that is will cover non-tidal wetlands inside the containment area. Mr. Gemar explained that the wetlands are disposal areas that were never completely filled in and over time became wetlands. One of the ARARs is to replace the wetlands at least on a one to one basis (i.e., for every acre destroyed replace and acre with new wetlands). The agencies may request greater than one to one replacement. This has not yet been determined. The new wetlands would be created in the upland areas and will include the creation of a new, higher value pickleweed wetland. The Wetland mitigation plan is currently being reviewed by various agencies and experts to develop a final workable plan. A presentation slide was shown that identified the existing wetlands within the containment area (see slide 10 in the presentation handout). Another slide showed the history of Wetland X from 1954 through 1970 (see slide 11 in the presentation handout). Subsurface conditions at Wetland X were depicted in several photographs shown on slide 12 in the presentation handout. Another slide identified existing wetlands, anticipated wetland loss area, and proposed wetland creation areas (see slide 13 in the presentation handout).

Mr. Gemar explained that Alternative 3 for the Containment Area is the complete removal of all waste and transport offsite for disposal. This alternative is not usually considered due to past U.S. EPA experience and development of presumptive remedy for landfills. It would require

approximately 48,000 truckloads of waste to be removed from the site over a 2 to 3 year period. This alternative moves waste from one area to another and exposes workers to more potential hazards than other alternatives. In addition the public would be exposed to the waste transportation hazards.

Mr. Gemar summarized a comparison of the alternatives. Both Alternative 2 (Containment) and Alternative 3 (Removal) meet required criteria. Containment is much more practical to implement. Removal creates higher short term hazards to workers and the public in handling large amounts of waste material and transporting the waste for disposal. Containment can be implemented in months verses the years for the removal. The cost of containment is approximately $36,775,000 verses the removal cost of $233,000,000.

Ms. Hayes asked what would happen to the slurry wall if removal of the landfill occurred. Mr. Gemar responded that the slurry wall would remain in place and continue to be operated to serve as an impediment to groundwater flow. The leachate generation would tend to diminish if the wastes were removed.

Ms. Loizos asked if landfill gas monitoring will occur and if there would be landfill gas extraction. Mr. Gemar responded that eight gas vent wells will be installed to evaluated landfill gas. It could be that only a passive vent system will be required. If gas concentrations are higher, then possible treatment of the off-gas may be required. As part of the pre-design activities, the gas wells will be installed to determine what will be required. In the mid-1990s, an evaluation was done of landfill gas and limited gas was found. This may be do to the type of landfill at IA H1 in that it is more of a military landfill verses a municipal landfill that generates more gas. Ms. Loizos asked if the landfill gas monitoring would be part of the remedial design. Mr. Gemar responded yes.

Mr. Gribble asked if Mr. Gemar could distinguish on the figure the two types of landfill caps and where one verses the other would be located. Mr. Gemar explained that he did not identify the RCRA boundaries on the figure. He pointed out on the slide that the RCRA boundaries are on the western half of the containment and on former surface impoundments for the industrial wastewater treatment plant. Out of the 70 acres within the containment, about 25 acres are RCRA areas and 45 acres are non-RCRA areas.

Mr. O'Loughlin asked whether the landfill would produce enough methane to generate electricity like at the landfill in American Canyon. Mr. Gemar responded that it is not expected to due to the type of landfill at IA H1 and that it is not a municipal landfill. Mr. Gemar explained that more would be known after the installation of the gas vent wells.

Mr. Gemar stated that the second area discussed in the FS is the Upland Areas outside of the Containment Area. Mr. Gemar pointed out on a slide (see Slide 16 in the presentation handout) the boundaries of the Upland Areas. The area includes possible wetland mitigation areas.

Ms. Krevsky asked how the new wetland areas are made. Mr. Gemar explained that the first thing that needs to be done is to lower the land elevation so that subsurface irrigation occurs. At Mare Island this would be at a mean sea level of about 8 feet. The dirt would be removed down

to this elevation. Then planting of the target plant species would occur, in this case pickle weed, fat hen, and alkali heath for the salt marsh harvest mouse. These plants would be planted in the fall before the rainy season. The wetland would be monitored over time and there are certain criteria that would have to be met in terms of coverage.

Mr. Karr asked if that course would be followed, could the removed soil be used as part of the landfill cap. Mr. Gemar stated that the removed soil would be used as a base to the cap and used to fill in gaps and build necessary slopes. Mr. Karr asked whether much soil would be removed from IA H1. Mr. Gemar responded that in this case no soil would be removed off-site, just relocated.

Ms. Hayes asked if Mr. Gemar knew whether there were salt marsh harvest mice in Wetland X and whether any type of trapping would be required. Mr. Gemar stated he was not sure. A discussion with Fish and Wildlife is scheduled for December 10, 2004 and there is a possibility that they will want trapping completed at Wetland X. In the early to mid-1990s as part of a thesis, there was trapping at Wetland X. The results were that over 3,600 trap nights, five mice were trapped. Wetland X is not considered a favored location for the mice due to the isolation of the wetland from other wetlands, and the movement from Wetland X to other areas would cause the mouse to be exposed to potential predators.

Ms. Hayes commented that the better the quality of the habitat the more mice there will be. Mr. Gemar agreed and explained that the larger the contiguous area, the more mice there will likely be. He showed on a slide that the proposed mitigation area would create a larger contiguous wetland area.

Mr. Gemar stated that for the Upland areas there are four alternatives being evaluated in the FS report including no action (Alternative 1); institutional controls, hot spot removal, groundwater monitoring, and a two-foot soil cover (Alternative 2); institutional controls, limited hot spot removal, groundwater monitoring, and a two-foot soil cover (Alternative 3); and institutional controls, upland excavation, and disposal (Alternative 4). Alternatives 2 and 3 are similar, but the difference is that Alternative 3 would only remove soil from hot spots that could potentially contaminate groundwater. Alternative 4 would involve removal of at least the top two feet of soil and replanting and repair wetlands over time.

Alternative 2 is removal of all hot spots that were identified in various investigations and were determined in a human health and ecological risk assessment to be above acceptable limits. The soil in these hot spots would be removed and placed as the sub-grade material within the containment. Two-feet of soil cover will be placed over these areas or the areas will be transformed into wetland areas. Removal of the hot spots will bring the overall average of contaminants in soil to be within the acceptable range for human health risk. The two-foot of soil placed on top would provide a buffer for establishing plant growth and creating a buffer for exposure to debris. Groundwater monitoring will ensure that no further contamination of groundwater is occurring from missed spots or leaching.

For Alternative 3, smaller hot spots will be removed, primarily those that threaten groundwater. Other factors are the same as Alternative 2. Alternative 4 would involve removal of all of the

soil on upland areas ranging from 2 feet to 14 feet depending on the depth of the contamination. The soil would be removed to the Containment Area.

Mr. Gemar summarized the alternatives for the Upland Areas outside the Containment Area. Alternative 2, 3, and 4 would satisfy the required criteria. Alternative 2 and 3 provide the greatest protection to the environment and are preferred based on the short-term and long-term effectiveness, implementability, and cost. Alternative 4 is much more difficult to implement and has more severe short-term impacts due to the large amount of material required to be excavated. There is not a huge difference in the cost to implement Alternative 2 and 3, which are $6,363,000 and $5,844,000. The difference is there is more soil to be removed with Alternative 2.

Ms. Krevsky asked how the alternatives are developed. Mr. Gemar responded that typically historical remedies at similar sites are looked at for implementability. Then a short list of alternatives is created by engineering judgment and is evaluated.

Mr. Dunaway stated that the United States Environmental Protection Agency (EPA) has standard remedies for landfills (i.e., a presumptive remedy) that apply to the landfill. Mr. Gemar added there are previous larger sites that had small pockets of contamination, which were removed and consolidated with the larger areas. That is essentially what would be conducted for the Upland Areas.

Ms. Christian asked if the cost is more important than the efficiency of the remedy. Mr. Gemar explained that the cost is one of the five balancing criteria used to evaluate the remedies. The first two criteria (protection of human health and the environment and meeting ARARs) must be met. The next five criteria are used to balance the benefits verses the cost, and the last two criteria (regulatory acceptance and community acceptance) are modifying criteria that must also be met.

Ms. Christian asked if any nuclear material is in the landfill. Mr. Gemar responded not to his knowledge but no one knows for sure.

Mr. Gribble commented that it is not known for sure if radiological materials are in the landfill. The contents of the landfill were never investigated. What was investigated is the near surface conditions that are readily accessible and the groundwater that is coming out of the landfill. They can say with some confidence that they don't see any radiological contamination coming out of the landfill from the surface or the groundwater, but we can't say for certain that in the future it will not be present. From the view of DTSC it needs to be monitored. If the landfill was removed and transported, there would be a risk of ordnance and exposing the contents of the landfill to the public during transportation. Although this is not a reason to not remove the landfill, it is a factor in the decision for selection of the remedial alternative.

Mr. Dunaway explained that a good example of the cost issue when comparing Alternative 4 with Alternatives 2 and 3, is that the difference is in the order of two or three times more expensive. Mr. Gemar clarified it is close to a factor of 10. Mr. Dunaway explained that removal of the contents of the landfill would not really reduce the risk that much more than Alternative 2 and 3. You could spend 10 times as much money, but the benefit is not 10 times

greater. This is where the cost needs to be analyzed (i.e., are you getting the best result for the money).

Mr. Gemar stated that the third and final area that was evaluated for remedial alternatives in the FS is the Non-tidal Wetland Areas. These areas were pointed out on a slide (see Slide 23 in the presentation handout). There are three alternatives for the Non-tidal Wetlands including no action (Alternative 1); institutional controls, hot spot removal, and long term sediment monitoring (Alternative 2); and institutional controls and remove the top two feet of wetlands (Alternative 3), which would be a more drastic step.

Mr Gemar stated that Alternative 2 (hot spot removal) is similar to the upland areas approach. Hot spots were determined from previous investigations with elevated contaminant levels. These hot spots are in three small areas. One additional hot spot with elevated levels of manganese is in a less accessible area and would result in harm to the wetland areas to reach it. For this area it is proposed that the hot spot remain in place and monitoring be conducted of the sediments to determine if contaminant levels are changing over time.

Mr. Gemar stated that Alternative 3 is the removal of the top two feet of soil in the Non-tidal wetland areas. This alternative would result in destruction of the wetland habitat of the salt marsh harvest mouse and would result in a significant short-term impact to the wetlands.

Mr. Gemar summarized a comparison of the alternatives. Alternatives 2 and 3 satisfy the required criteria. Alternative 2 provides the greatest protection to the environment and is preferred based on short-term and long-term effectiveness, implementability, and cost. Alternative 3 provides the most long-term effectiveness however, it presents the most risk and impacts to the wetlands because the wetlands would be removed and then replaced. Alternative 2 is the preferred remedy for the Non-tidal Wetlands outside the Containment Barrier with a total cost of $400,000. Using this alternative, the hot spots would be removed and relocated to the containment area. There will be no off-site disposal of materials.

Mr. Brown asked how the hot spots were identified. Mr. Gemar explained they were found during the risk assessment process. If soils are higher than the thresholds determined by the human health or ecological risk assessment, then the soils are considered hot spots.

Mr. Karr asked how the sampling was conducted. Mr. Gemar explained that areas were selected based on potential for contaminant movement or suspected areas (like perimeters) and surface water. The sampling is done on a random and non-random basis. When an area is found, then you step out from the area until no additional contamination is found.

Mr. Lucey asked what the cost was for Alternative 3. Mr. Gemar explained he didn't include the amount because he couldn't recall the number and due to the short notice for preparing the presentation. He stated it is in the FS however. He estimated that it is the order of 10 times the cost of Alternative 2.

Mr. Gemar summarized the next steps of the FS. The comments on the Draft FS are due in mid-January 2005. Based on those comments, responses would be developed and a Draft Final FS

would be prepared and submitted for another round of reviews. The remedy will be selected for each of the areas. Once the remedies are selected, it will go out for public comment. There would be a public meeting to go over the rational for why a particular alternative was selected. Based on public input and agency input then a final Remedial Action Plan (RAP) and Record of Decision (ROD) would be signed, which is anticipated in June 2005. The remedial action would begin in Summer and Fall of 2005.

Questions

Ms. Loizos asked how large the hot spots are. She also asked how the hot spots are removed and what affect the removal has on the habitat. Mr. Gemar responded that there is approximately 30,000 cubic yards of soil to be removed for Alternative 2 on the Upland areas. For the Non-tidal wetlands he was unsure of the exact amount but stated it was significantly less. For the hot spots, which are along the perimeter of the wetlands, hand removal of vegetation will occur and a barrier would be placed to dissuade the salt marsh harvest mouse from coming into the removal area. The actual removal process will have to be discussed and negotiated with the agencies.

Mr. Lucey asked what the difference between hot spots along the perimeter of the wetlands and the manganese hot spot is in terms of wetlands. Mr. Gemar referred the question to Mark Kleiner of Weston who had worked on the project. Mr. Kleiner identified on the slide where the manganese hot spot was and pointed out other hot spots on the slide. Mr. Gemar explained that the vegetation would have to be cleared in order to get the equipment to the area to excavate the soil.

Ms. Loizos asked how the hot spots contaminated with manganese will be monitored (i.e., by bioavailability or some other method). Mr. Gemar responded that the soil would be monitored and not the organisms.

Mr. Gribble commented on the time line for implementing the RAP/ROD as presented on the last slide. He stated that from DTSC's perspective this will be a RAP/ROD and RCRA closure plan because there is a part of the landfill that is a RCRA unit. The two processes are being unified. The final document will be different from those seen in the past in that it will be a RCRA closure plan as well.

Mr. Gribble asked whether the berm in the Uplands area would remain as part of the proposed remedy. Mr Gemar responded that the berm would remain in place. The hot spots would be removed and two feet of dirt would be replaced on top of the hot spot areas.

Mr. Gribble asked if Mr. Gemar would show the slide that presents the wetland areas. Mr. Gribble stated a good portion of the wetlands within the containment is present and exist because the Navy and their contractors did not manage the cover properly to keep the wetlands from establishing. He stated it is unfortunate that the Navy did not take the advice of the agencies and manage the temporary cap and now wetland areas will be destroyed. As far as the containment remedy goes, it is important to note that DTSC has been saying for years that the remedy will most likely be containment. DTSC believes that containment is the best remedy for this landfill and if the public has any comments or disagrees with the remedy then this would be the time to

provide feed back. Another issue is that Weston is proposing two different types of caps for covering the RCRA units and non-RCRA units. DTSC may require a RCRA cap over the entire containment area, but this issue still needs to be worked out. DTSC is interested in the cap design in that it should be minimized to reduce the load for weight purposes, but maximized for protection.

Ms. Hayes asked what will the extra weight do. Mr. Leftwich responded that with any area underlain by bay area mud, if weight is placed on it, long term settlement may occur. Mr. Gemar further clarified that as part of the pre-design, a 10-foot high settlement pad has been placed over the containment. He stated that given that the landfill is over 40 feet thick in some areas that an addition 4 foot of cover will not most likely create a significant settlement condition.

Ms. Hayes asked whether there had been substantial settlement over time before the slurry wall was installed. Mr. Gemar responded that the settlement has not been thoroughly studied, but that the landfill has been surveyed and has not changed much in the landfill over the last several years.

Mr. Dunaway asked if Mr. Gemar could explain what the impacts of excessive settlement would be. Mr. Gemar stated that if significant differential settlement occurred and the liner had been constructed so that it was seamed together, the tensile pressure could cause a failure in the liner. If the liner was overlapped and not enough overlap was provided, a gap could be created by settlement. The main worry is for the integrity of the liner. Mr. Dunaway added that there could be impacts to the drainage as well.

Mr. Gemar further explained that a typical slope for the landfills is designed for about a 3 percent slope. Weston will design the slope to allow for some settlement by creating a 3.5 to 4 percent slope. Mr. Gemar stated that there is also a regulatory requirement for long-term maintenance of the cap. Part of the long term maintenance is to look for settlement.

Mr. Gribble stated that DTSC rejected the Navy's application for operation of the landfill several years ago due to the issue of settlement. The debris that was disposed of was much more dense and created an unstable settlement situation. Mr. Gemar stated that the slope on the landfill is gentle and there is not much instability due to the gentle slope. Part of the design is to conduct a geotechnical analysis of stability including seismicity (i.e., earthquakes).

Ms. Krevsky asked about liquefaction and stated that your placing all of these layers on top, but what is going on underneath. Mr. Gemar stated that liquefaction and other worst case scenarios will be included in the geotechnical analysis during the remedial design.

Ms. Krevsky asked what will be going on in the clay and groundwater levels beneath the landfill and the leachate. Mr. Gemar responded that the slurry wall extends into the clay layer beneath the landfill and the water is captured before migrating laterally. By extracting groundwater over time and putting a landfill cap over the top, the head pressure is reduced, which will in turn reduce the likelihood of vertical migration of contaminants. Between the shallow and intermediate groundwater bearing zones, there is in some areas up to 50 feet of clay, which creates and aquitard to also aid in preventing vertical migration of contaminants. During various

investigations, borings were conducted down to bedrock, which is about 150 feet below the ground surface. Most of the soil in the borings was clay.

Ms. Hayes stated that many of the alternatives presented included land use controls and asked if Mr. Gemar could talk about what land use controls means. Mr. Gemar stated that it is still to be determined. For the RCRA units typically fencing or barriers of some type are required. Mr. Gemar stated he has not spoken with the agencies yet about the land use controls.

Mr. Gribble stated that some of the proposed institutional controls should be included in the Draft RAP/ROD/RCRA Closure Plan. Institutional controls would include restrictions from use by daycares and schools. Other institutional controls may not be obvious. Institutional controls for RCRA landfills typically mean restricting the public from access to the surface area usually by a fence with a locked gate. A decision has not been made at DTSC for this site. The city has designated this area as part of their open space plan. DTSC sent a letter to the city a few years ago stating that restricting this area by placing a fence and locked gate could be a possibility. Mr. Gribble stated that if people have expectations that the landfill will be used for ball fields or hiking trails, then this would be the time to voice your concerns and provide feedback.

Mr. Dunaway stated that what Ms. Hayes wanted to point out is that the area where the landfill is situated has been designated as open space. As far as land use controls for landfills, there are general requirements the Navy would like to see in place. Mr. Dunaway stated that at another of his sites in Southern California, the land use controls are part of the ROD for long-term protection. In a general way, hospitals, daycare centers, residences, and schools cannot be built on the landfill area. Residences are being built next to the landfill and the Navy put a fence around the landfill to define the perimeter and ensure nothing will be built on the landfill. In addition, there is a six-lane wide roadway over this landfill and utility systems in place, which are a suitable use. There are restrictions and procedures in place for working on the utility lines within the landfill perimeter to protect the remedy. The goal is not to build sensitive structures that would cause a risk of exposure and to have restrictions and procedures in place to protect the integrity of the remedy. This is something DTSC would focus on during development of the land use controls.

Mr. Gribble stated that the difference here is that this is a RCRA hazardous waste landfill verses a municipal landfill. Generally, DTSC approaches this differently. Part of the thinking behind putting a fence around a RCRA landfill is to prevent the public from accessing the cap and possibly damaging the cap.

Ms. Hayes stated that she thinks DTSC should think outside their normal practices for landfills and talk to the public about possible controls other than a fence. She stated that putting a fence around something is not going to control erosion or make the area inaccessible or protected. She stated this seems simplistic and provided and example how a wildlife refuge was fenced off from the public and how it failed from preventing public access. Ms. Hayes stated she would like to see new thinking on this and not the typical controls just because they are used at all of the other sites. Ms. Hayes stated that a fence may provide incentive to kids to cut through the chain-link and use the area for a "playground." She stated that possibly keeping the area as a well groomed park area instead of natural land may be a better remedy and protect the cover better than a

fence. She asked that other options be considered and more dialogue with the public before the official comment period.

Mr. Gribble responded that DTSC mentioned this issue to the RAB in the past and had brought it to the City's' attention in writing, and also is bringing it to the attention of Weston. Mr. Gribble stated he is bringing this issue up tonight to make sure the RAB can have time to provide input. The public's concern will be part of the discussion and debate at DTSC when they decide the appropriate controls for this site. Mr. Gribble asked what DTSC can do to make sure the public's perspective is taken into account.

Ms. Hayes stated that as a member of the public and being that this is a regional facility for recreational space (as indicated on Area 13 of the reuse plan), there has been no recent reports to the City Council about this being an issue and she doesn't think it is on the radar screen. What DTSC tends to do, in her opinion, is to look at what they have done in other places and apply those same controls at all of the sites based on what DTSC thinks is the most manageable remedy on a RCRA landfill. Ms. Hayes would like to see the decision makers come in and tell the public that they have looked all over the world and researched possible alternatives. Ms. Hayes asked that a discussion with the public be done before the 30-day official comment period and before the decision has been made.

Mr. O'Loughlin commented he would like to have seen the landfill go into wildlife habitat and transferred to the Fish and Wildlife service. He stated he is disappointed that someone in the Navy did not decide to transfer the land in the future because it is very compatible with the areas to the north and the island across Highway 37.

Mr. Dunaway stated that a chain-link fence is not a land use control it is more of an engineering control that is part of the remedy. It is just like the landfill cover in that it is a physical barrier. It is not a legal instrument or city ordnance. Mr. Dunaway suggested a focus group meeting during the FS process. During the focus group meeting the RAB can use their third party technical advisors from San Jose State, who do work across many states on sites like this. They have the technical knowledge to help the public. Mr. Dunaway stated that there are specific RCRA regulations such as putting a fence around a RCRA landfill that may not be able to be broken. Many landfills have fences around them, which are prescribed by law even after it is capped. Fences are placed around even municipal landfills to prevent exposure and damage to the remedy. There may be some alternatives to a chain-link fence. Mr. Dunaway provided an example at the Mountain Warfare Training Center in the Sierras where they used three-string barbed wire, which already existed in the area due to ranching. This served the purpose of deterring people and vehicles from getting onto the site. Although it may not prevent all access, it was not as intrusive as a chain-link fence. Mr. Dunaway again suggested a focus group meeting during the development of the FS and to bring in technical advisors from San Jose State, DTSC, and EPA.

Ms. Hayes stated that this issue is not something on the City's operations and maintenance radar screen. They are busy getting infrastructure ready that will possibly generate revenue for the City. The folks in the City who will be in charge of maintaining the remedy should be involved.

Mr. Gribble stated that the starting point for RCRA landfills is a fence. However, DTSC has not made there decision yet due to the public's and City's interest in the landfill areas use as open space. Mr. Gribble stated that this particular site is a challenge and something DTSC is not used to dealing with. If this issue had not been raised, then there would be a fence. Mr. Gribble liked the idea of a focus group meeting relatively soon. He stated he could try to arrange the meeting and get the appropriate RCRA folks together. Mr. Gribble asked Mr. Leftwich who in the City should be contacted about the landfill issue. Mr. Leftwich responded that the point of contact for planning and ultimate disposition of that portion of land is Michelle Hightower in Planning.

Mr. Dunaway clarified that this is land that is State reversionary property and he is not sure if the City has the legal authority to control it unless the State gives it to the City. The Navy has a grant from the state and once the Navy is done with the cleanup, they have to give the state the option to take the property back. The state is a stake holder in this issue and that should be taken into account.

Ms. Krevsky commented that she finds it interesting that the reuse plan has divvied up Mare Island and the cleanup has followed it pretty closely. Then the land use for the landfill was included in the count of acres for the communities open space and now nothing is being done and access to it will be restricted. The land should be made use of as planned.

Mr. Gribble stated if the City can't use the land and there is some legal requirement for the amount acreage for open space use, then they would have to make up that use some place else.

Mr. Karr clarified that although it is not the right answer, open space designation does not always encompass public access. Ms. Hayes responded that the land is designated for recreational use.

Mr. Gribble commented on what Mr. O'Loughlin had said previously about the landfill being added to the wildlife refuge. He stated that most of IA H1 is west of the Joy Survey line, which means that the State Lands Commission has reversionary rights to the property if the Navy gives them title to it. The State Lands Commission would most likely be reluctant to take title to IA H1. This may not be the case with some of the other areas of IA H1 outside the containment zone that could be adequately remedied. There could be a realistic probability of some of it being transferred back to State Lands Commission.

Mr. Gemar stated that in January it would be appropriate to get together for a meeting while the FS and other documents are under development. There can be discussion of possible alternatives for fencing and possible other barriers. He stated that there will be a gravel base perimeter road that will provide access for sampling monitoring wells that might be considered a good jogging trail. This would be a good time to talk with Michelle at Planning and Fish and Wildlife. There are many issues to be discussed and the agencies may want to look at them as a whole package. He suggested a meeting in mid-January to discuss the alternatives.

Ms. d'Almeida pointed out that is was almost 9 pm. Mr. Dunway stated that we are going to have to bring the issue to a close for now and move on to administrative business. Mr. Dunaway thanked Mr. Gemar for putting the presentation together on such short notice. Mr. Dunaway suggested that Mr. Gemar, Mr. Gribble, and Mr. Leftwich talk about setting up a date in January

for the focus group meeting. Mr. Dunaway will send an email to the RAB regarding the suggested dates.

III. ADMINISTRATIVE BUSINESS (Myrna Hayes, Jerry Dunaway)

Mr. Dunaway stated that in the interest of time that the break will be skipped and will move onto the second half of the RAB meeting.

Mr. Dunaway stated that the October RAB meeting minutes were mailed out. He stated that he did not get additional comments on the September RAB meeting minutes. If anyone has comments, please submit them to Mr. Dunaway, Ms. Hayes, or Ms. Clifford. Mr. Dunaway announced that in response to all of the discussion about changing the type of meeting minutes, that starting with the January 27, 2005 RAB meeting, a stenographer will be used again to take verbatim meeting minutes. The cost of the stenographer will be split between the Navy, Lennar Mare Island, and Weston Solutions.

Mr. Dunaway stated that for the January RAB meeting, the agenda will focus on a round table discussion among RAB members. He stated we want to here from all of the RAB members on what they think the benefit of being a RAB member is. He stated there will be discussion on how to improve community awareness. Mr. Dunaway will send out an email before Christmas so that all of the RAB members can plan for the meeting. No technical presentations will be presented at the January meeting.

Mr. Dunaway stated that one of the issues raised at the focus group meeting regarding community relations was how to increase the mailing list. Mr. Dunaway passed out a draft sample post card that was developed in response to this issue. Mr. Dunaway stated he would like to hear any comments or suggestions for the post card. A few things that have been brought up are increasing the size of the text, adding a line for email address, and adding a privacy option. It is a post-card to be placed in various areas or handed out at other venues.

Mr. Dunway stated that due to the time, that focus group reports will not be presented.

IV. PUBLIC COMMENT PERIOD

Ms. Krevsky mentioned that another thing that came up in the last focus group meeting was to define the scope of grants for technical assistance and what the funds should be used for. She suggested that during the round table discussion, an approach could be developed on what the grant funds could be used for.

Ms. Hayes asked that for those who prepared monthly progress reports to pass them out. The Navy, Weston, and Lennar passed out their progress reports.

Mr. Dunaway stated that the one critical thing he wanted to mention was that the December 9, 2004 remedial project manager meeting has been cancelled and will be rescheduled for January 2005. He stated that a RAB tour was held on November 6, 2004 and there is a discussion about

it in the Navy's progress report. Mr. Dunaway also stated that additional handout packets from the RAB tour are available for those who could not attend.

Ms. Krevsky asked who to send comments to regarding the postcard. Mr. Dunaway stated he will follow up with an email to everyone and that comments can be sent to Mr. Dunaway.

Ms. Hayes reminded everyone that the Flyway Festival is scheduled for January 21 through 23, 2005.

Mr. Jespersen stated that one thing on their handout is about import soil and he wanted to thank Mr. Gribble for his help in getting the appropriate soil needed in a timely manner.

There were no further comments and the meeting adjourned at 9:18 p.m.

LIST OF HANDOUTS

The following handouts were provided during the RAB meeting:

- Presentation Handout: *Investigation Area H1 Draft Feasibility Study (Mr. Dwight Gemar, Weston Solutions)*
- Weston Solutions Mare Island RAB Update November 2004
- Lennar Mare Island Mare Island RAB Update November 2004
- Navy Monthly Progress Report Former Mare Island Naval Shipyard November 2004

CDM Transmittal

CDM.

9444 Farnham Street, Suite 210
San Diego, California 92123
(858) 268-3383
(858) 268-9677

To:	Diane Silva	**From:**	Regina Clifford
Organization/ Address:	Navy SWDIV 1220 Pacific Hwy., Bldg 129 San Diego, CA 92132 Phone: (619) 532-3676	**Date:**	March 28, 2005

Re: Mare Island Information Repository – Final Minutes for the December and January 2005

Job #:

Via: *Mail:* *Overnight:* Fedex 2-day *Courier:*

Enclosed please find:

For your information	X	**Approved**	
For your review		**Approved as noted**	
For your signature		**Returned to you for correction**	

- **Message:**

Diane,

Enclosed please find two copies each of the final RAB meeting minutes from the December and January 2005 RAB Meetings at Mare Island Naval Shipyard for the administration record/information repository. Please call me with any questions

Thank you,

Regina Clifford
Project Manager

Regina Clifford
Signed