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Sec-09

February 23, 1996

Engineering and
Environmental Office

Ms. Carla Struble, P.E.
U.S. Environmental Protection Agency
Emergency & Remedial Response Division
290 Broadway
18th Floor, E-3
New York, New York 10007-1866

Mr. Kamal Gupta
NYS Department of Environmental
Conservation
Bureau of Eastern Remedial Action
Division of Hazardous Waste Remediation
50 Wolf Road, Room 208
Albany, New York 12233-7010

Dear Ms. Struble/Mr. Gupta:

Enclosed are the minutes from the January 24, 1996 Technical Review Committee meeting for your review. Please note that the stenographer that was assigned to this meeting was not familiar with the nomenclature and acronyms. Some discrepancies in the text have been noted.

If you have any comments or questions, contact Stephen Absolom at (607) 869-1309.

Sincerely,

/S/

Stephen W. Brooks
LTC, U.S. Army
Commanding Officer

Enclosure

CF: Legal Ofc

STATE OF NEW YORK COUNTY OF SENECA

MEETING OF THE TECHNICAL REVIEW COMMITTEE

HELD AT: Seneca Army Depot
Romulus, New York

HELD ON: January 24, 1996

REPORTED BY: Mary Dianetti

Tiro Reporting Service
536 Executive Office Building
Rochester, New York 14614

MR. ABSOLOM: If I could have your attention, I will call the meeting to order.

I would like to welcome everybody to the Seneca Technical Review Committee. It's been a long time coming, between furloughs, snowplows. It's hard to schedule and coordinate, and we finally did it. To start with, I would like to go around the room and have everybody introduce themselves so that everybody has an understanding of who is here and where they are from, and we will start at the front.

MR. HEALY: Kevin Healy, from the Army Corps of Engineers, and I am the lead engineer for all RIF work for everything that is coming.

MR. DUCHESNEAU: Mike Duchesneau, Parsons Engineering Science. I'm Project Manager.

MR. CHAPLICK: James Chaplick, Parsons Engineering Science. I'm an engineer.

MR. BATTAGLIA: Randy Battaglia, Army Corps of Engineers.

MR. ABSOLOM: I'm Steve Absolom, Environmental Coordinator.

MR. BUCK: John Buck, U.S. Army Environmental Conservation.

MR. KLIESER: Harry Klieser. Also with the U.S. Army Envitonmental Center, and John really is in project

oversite and funding.

MR. GERAGHTY: I'm Dan Geraghty, I'm with the project from the New York State Department of Health.

MS. FALLO: Janet Fallo, Seneca Army Depot Environmental Office.

MR. ENROTH: Tom Enroth, Engineer, Seneca Army Depot Environmental.

MR. MEHTA: Manmohan Mehta, New York State Department of Environmental Conservation.

MR. GUPTA: Kamal Gupta, New York State Department of Environmental Conservation.

MS. STRUBLE: Carla Struble, from the USEPA, Project Manager.

MR. NELSON: Bruce Nelson, Malcolm Pirnie.

MR. SCOTT: Robert Scott, New York State Environmental Conservation.

MR. HODDINOTT: Keith Hoddinott, Office of the Surgeon General.

MR. WHITAKER: I'm Jerry Whitaker, I'm a Base Transition Coordinator at Seneca.

MS. JONES: Pat Jones, Local Development Authority.

MS. LOMBARDO: Public Affairs Officer for Seneca.

MR. SERWINOWSKI: Mark Serwinowski, with the OHM

Remediation Services.

MS. MC LAREN: Julie McLaren, I'm just an interested citizen.

MR. SERRETT: My name is Carmen Serrett, I'm with the Labor International, based in Waterloo, New York.

MR. IVES: I'm Frank Ives, Business Representative for the International Union of Products Engineers.

MR. DUNCAN: Bob Duncan, Seneca Army Depot, Environmental Management.

MS. OGDEN: Joanne Ogden, Legal Office Representative from Seneca.

MR. CAFORA: Dave Cafora, just a taxpayer.

MR. MICHAELS: Jerry Michaels, a concerned citizen.

MR. CHAFFIE: Neil Chaffie, Public Newspaper.

MR. KENNEY: Richard Kenney, concerned citizen.

MR. VELTE: Cliff Velte, Town and Village of Waterloo.

MR. TOOMBS: Martin Toombs, Finger Lakes Times.

MR. ABSOLOM: I would like to thank everybody for that. I will advise everyone we are having this recorded, so if you have a question or answers, we need one question, we will respond to it. We need to have only one person talking at a time so it can be properly

recorded.

With that, I would like to start the meeting off with a description and presentation of what the Restoration Advisory Board is.

Let's start out with what's a RAB? Well, a RAB is really -- let's do it that way. What is a RAB? A RAB is Restoration Advisory Board. It's where the community members, local politicians, installation representatives and regulatory agencies have the opportunity to participate in an open meeting on environmental restoration activity at a given site. The RAB is individuals providing individual support. The intent is to mirror community interest to ensure that what the community wants is being addressed in environmental restoration. It is a way to provide input, a clean-up program. A consensus in a RAB is not a requirement. You may vote on things such as meeting times, that may use consensus, however, to provide advice or input, the RAB will not have consensus.

What is the purpose of a RAB? The purpose of a RAB is a forum for community influence. It creates a partnership with State holders in the community. State holders can be anyone. It can be a regulatory agency, it can be a concerned citizen, local politician, anyone who has any kind of interest at an installation is considered

a State holder. The RAB does not replace other forms of public participation. We will still have public meetings when we have certain activities, such as we have a record of decision to be presented. That type of public information will still occur, intends to build credibility for the Department of Defense and the community so that they understand the process of what occurs at the site, what remediation activity occurs to provide more responsive means for cleanup. It is a benefit to both the Army and the community. The Restoration Advisory Board is typically co-chaired. It is co-chaired by someone from the Department of Defense, and at Seneca place, I will be co-chair here, and it also has a co-chair from someone from the community, it's a community representative. The intent of that is to coordinate, support. It is to ensure that the installation open constructive participation, in other words, are we listening to what the community has to say. That is what the co-chair is there for, to help support that, to foster that. It is to help identify the project requirements, provide feedback to the appropriate State holders, ensure that documents are received by the RAB Committee in a timely manner. It is to help defer, not cleanup issues, to the appropriate organization. If you are worried about, for example, if you are worried about a real estate act, the RAB may not be the

appropriate place to bring that up, and the co-chair will help develop those questions to the right people. RAB responsibility is the State and EPA had some responsibilities in this. The regulatory agency that we report to for -- or they have a requirement for attendance. They have been at the RAB meetings. They are also considered a shareholder at the installation. As they do now, they will review and provide documents, comments. They help facilitate resolution of issues and concerns, help resolve problems, and they also help with training the people on the Restoration Advisory Board so that they understand the process and they understand what is going to occur. They're a partner. The regulatory agencies are a partner with the Army and the community. RAB responsibility is, public participation. We have asked for public participation in the form of membership in the RAB. This is a voluntary job, a voluntary membership. There are no payments for participating in the Restoration Advisory Board. The intent is that the public participation provides feedback to the community, so that the community understands what is going on. They take ownership of the program as well as the Department of Defense in the regulatory community. One of the big things that the public participation of the RAB member from the public do is that they will also review

documents. They will review, draft documents and provide comments and feedback early in the process, where right now they don't have that capability, as in the Technical Review Committee. It is a way to influence what happens here, so advantages of a RAB over a Technical Review Committee is that it does provide an open and forthright means of communication, it builds an understanding and trust that what is happening at the installation, what remediation are occuring are understood. They are common goals, shared goals, among the RAB members so that everybody feels as though they are part of the program. It forms a partnership between the three different organizations, Department of Defense, Regulatory Committee and the Community, itself. With the applications, if we have more applications for the RAB than what we feel is appropriate, particularly, a RAB will have somewhere between twelve and twenty participants. If there are five or six people that want to be on RAB, a selection committee will be formed. Typically, there will be people from the community and they will look at things like community interest. What does this person have for community interest? What is his community interest? How does he represent the community, is a supervisor, is just a concerned citizen, a businessman in the community? These are all things that the selection committee will

consider. Individual interests. Why is that specific individual there? What does he expect to accomplish? And for those who haven't seen the application, actually asks for this type of information, and we have some applications in the back. Qualifications. Are there some unique qualifications the individual has? Does he have a degree? You know, just what makes a good selection or not a good selection. Is a representative in balance for the community concerns? In other words, if you have five people that are representing the same organization, you only want really one or maybe two of those people on the Restoration Advisory Board. You don't need to have that five because that one organization's interest should be looked out for by one or two people. The last thing is conflict of interest. What that talks about or what that means is if a person is there, and wants to go on the Restoration Advisory Board solely for the purpose to try and influence what happens so that his or her company or organization has an edge over someone else, that is potentially a conflict of interest. The key is, though, that a RAB, a Restoration Advisory Board is not a designating body so it's somewhat difficult to say there is conflict of interest, but it can happen, so that is something that is always considered. Because we already have a Technical Review Committee, what we are really

doing, we are converting this body here, this Technical Review Committee to a Restoration Advisory Board, the RAB. Meeting requirement of the public law, it says we will have a Technical Review Committee. We are going to expand this one to add the community co-chair. We are going to add additional representatives from the community on the RAB. We will be advertising the meetings. Our Technical Review Committee meetings have always been open to the public. The RAB meetings will also be that way, and we will publish minutes. There will be informal minutes versus what we do now with a court reporter, provide an advanced agenda so that everyone going to attend knows what is going to occur and that we know what the discussions are going to be, and just try to have improved communications within the community. Generally people who have served on Technical Review Committees have a priority to serve on the Restoration Board.

MR. HEALY: That refers to only the public members of the CR, TRC? Government representatives won't be invited?

MR. ABSOLOM: What that means, what Kevin was highlighting was that typically only one Department of Defense person co-chair will be a member of the Restoration Advisory Board. Other people such as Kevin and Corps of Engineer Army Environmental Center, they're

support staff, they will be at the meetings, but they won't be designated a formal member of the RAB.

Does anybody have any questions on what a RAB is and how it is supposed to operate?

No questions? If there are no questions --

MS. JONES: Steve, how are you going to choose your community representative?

MR. ABSOLOM: The community represents the other co-chair. The co-chair, that may be the selection panel. What we are asking for in the application is an individual interested in serving. A co-chairman, if we only have one person that wants to co-chair, he or she may be that selection. If not, well, we may talk to both of them, and come to some mutual agreement or however.

MR. WHITAKER: We're currently soliciting interest in participating in the TRC from the community. What is the cut off for that?

MR. ABSOLOM: We are soliciting interest for the Restoration Advisory Board, and the cut off currently is seven of February. The RAB asked the applications be sent back by then.

MR. SERRETT: I'm wondering how many members are on the TRC committee?

MR. ABSOLOM: Currently there are twenty-one members, approximately.

Any other questions?

Kevin asked, or wanted me to confirm the TRC has twenty-one members. I said we are converting or expanding the TRC into a RAB. The Restoration Advisory Board will have somewhere between twelve and twenty members, most likely, on the whole, not have forty people on the Board because that would be an unmanageable number.

MR. SERRETT: So what you're saying, these people have first option to be on the committee?

MR. ABSOLOM: Community members have first --

MR. SERRETT: Okay.

MR. ABSOLOM: Many of the State regulatory people who are on TRC now, will not be official members of the RAB. They may be extra official members or they may be support of, of the designated or Federal, State of representatives. The intent of the RAB is to have community members on the Board, to understand what happens at a base and have some influence on what is going to happen.

Any other questions?

We do, as I said, we do have applications in the back if anybody is interested. There is also a fact sheet on the Restoration Advisory Board, and if you know someone else who is interested, they can also call me and talk to me directly. My phone number is 607-869-1309. I will be

glad to explain it to them. If there are no other questions on the Restoration Advisory Board, I would like to have Mike Duchesneau from the Parsons Engineering Science come up and give an update where we are on that restoration activity.

MR. DUCHESNEAU: Thanks a lot Steve.

What I will be discussing today is an update for the activity that we have been performing in regards to the CERCLA work that has been ongoing since approximately 1990, and maybe it's a good point at this time to probably say the reason we are converting TRC into a RAB is because of the BRAC closure requirements. The work that I will be describing to you today is ongoing work in regards to the CERCLA activity which is Comprehensive Environmental Liability Responsibility Act, and Seneca was listed an NPL site, which is a National Priority List site, and gone on the CERCLA list of sites to be evaluated, and that is where we got involved, and since the closure requirements are now at hand, we need to blend a lot of the work that we are doing under CERCLA with the base closure requirements, so we are going to convert this process we are at right now in kind of BRAC, to meet the requirements of BRAC as well as for the CERCLA, and that original chart that you see, and if you don't have a handout, I have a couple of extras if you need one. The original chart that

you see here, may change the next time we meet, as a result of the BRAC requirements, but in general, we have Steve Absolom, Project Manager at Seneca, and myself as contractor of Parsons Engineering Science, a host of folks from the Army side that helps review documents and provide input as well as the regulatory folks with UPA and NYSDEC, with the New York State Department of Environmental Conservation, and what I will be describing to you today is an update on some of the processes that we have been going through and basic focus in three areas. One is the SWMU Investigation/Classification Status Update. The second one is RI/FS's Status Update, and RI/FS's referring to Remedial Investigation Feasibility Study. It's a CERCLA or SUPRA term that describes a process that we follow to identify an investigation site and choose and evaluate various alternatives for cleaning the sites up. The final area will be an update on some of the Decision Documents for Removal Actions, and a Decision Document for Removal Action is another process that is described in the Federal Facilities Agreement that was signed, an agreement signed between the State of New York, DPA and the Department of Defense, that describes the process that we are going through in a little bit more detail than the CERCLA general requirements. There are some specific pathways that can be followed. One of which is a removal

action to deal with some sites that have small issues that could be cleaned up relatively quickly. To begin with, I will start off on the SWMU Investigation/Classification Status Update Report, and as I mentioned, the Federal Facility Agreement, otherwise known as FFA was the guiding document in this process, and this is the flow chart that essentially summarized the requirements that is outlined in that process. Again, it's an agreement between all the regulatory folks and the Department of Defense, and basically three phases. The first phase is to classify all of the SWMU's. The second phase is to do a preliminary site investigation to determine if there is a threat that the site possesses, and the last phase is the RI/FS phase that I mentioned earlier, and that is a more intense investigation and cleanup process for sites that had been identified as posing a significant threat. The SWMU Classification Report is what we call a primary document. It is a document that is identified specifically in the FFA, the Federal Facility Agreement, and it's a SWMU, I've used the word a couple of times, or the acronym, is Solid Waste Management Unit, and it is a term that describes a site or an area that has been identified as having a possibility of a release having happened there, or hazardous materials being handled at that location, and there is a reason to look at that in

terms of, you know, does it pose a threat, so we begin the process to first identify all of these SWMU's, these areas that there has been a possibility of a release or a threat, and we have done that as part of Seneca, and we have gone and identified seventy-two different SWMU's around this ten thousand acre facility. The report was presented, final on September 16th of 1994, and it is the first primary document in the IEG. IEG is a Interstate Agreement. It is another acronym the same as FAA, and somewhat interchangeable. A summary of SWMU's, classification of those SWMU's are as follows: There is a total of seventy-two as I mentioned. Twenty-four of those were classified as no action SWMU's. What that means, we looked into the historical record and background of these sites and determined an agreement with the regulatory folks that there is no need to pursue in any additional investigation, that there is no evidence of there being a release. Twelve of those were classified what we call in a Completion Report, in a ROD. That is a process that is identified SWMU IEG, as identifying these sites determining that they pose very little threat and classifying a ROD to determine how they are going to be, you know, dealt with. Another option is a Removal Action, and followed by a Completion Report and a ROD, and the Removal Action would be for a site that has obvious

evidence that there has been a release, it's localized and can be eliminated from further consideration by doing what we call a removal, where you essentially remove a material of concern and place in a secured area where it no longer poses a threat, and complete the process by doing a Completion Report and ROD. And the final option, of which there are eight of those, the final alternative would be an RI/FS, followed by a PRAP, which is a Proposed Remedial Action Plan, and final step of that process is to sign or agree to a ROD, which is a Record of Decision. A Record of Decision would be a legal binding contract between DOD and the regulatory folks that identifies exactly what the preferred alternative would be in terms of cleanup, and maybe it's appropriate to go back to the previous slide just briefly. I highlighted some of the stuff I just mentioned and that would be the classification flow check, basically allows you to see along this path, do a Completion Report or Removal Action and finalize that in a record before you go in the RI/FS process and end up doing a ROD along that pathway. I have listed in your handout a listing of each of the SWMU's and they are basically their name and how they are classified and, for example, there is no action ROD and there is listing of all twenty-four, I believe of those, and I'm not going to take the time to go through each one, but you can go through your folder

there and take a look at them. I also list the SWMU's that we have identified for Completion Reports, followed by ROD's. This whole process is essentially a risk driven process and the sites that pose the most significant risks have been followed along a more intense process, like a RI/FS process. The sites that do not pose much risk are classified along the different pathways depending on how much threat they pose, and the last group is the AOC's, or Areas of Concern that have been slated for RI/FS work and an AOC, is a term that we use for a SWMU that has been identified as needing some type of investigations. Once it crosses over into the zone of needing further investigation, it seems to be a potential for a threat, we call an Area of Concern instead of a SWMU.

Just to highlight some of the activity we have been doing when we first started this process, we tried to rank some of these sites in terms of priority, which is related back to how much threat they pose, and we identified seven of the sites, SWMU's as high priority, that there seems to be some evidence suggested, there is a greater concern for those sites, and I have provided you with sort of a breakdown of the activities that we have been performing. The documents that we have been submitting, we went out and prepared a workplan, did field work at every one of these sites, prepared a report

and received regulatory comments, revised reports, and I will be happy to say that the final report was issued on December 11, 1995, just about a month ago, and we are waiting for a final regulatory approval for that document. We identified three moderate priority AOC's, and we followed a similar pathway, prepared a workplan, did the investigation, the date for the report and obtained regulatory comments and review, and again this document is submitted final on December 11th, also, so I think we are moving forward in this process. At the end of each of these reports the Army has provided some recommendations to how they think these various sites need to be looked at further, and in this case, all three of the sites have been classified as needing further investigation and follow the RI/FS process. We also identified eight moderately low priority sites, did similar type of work, field work, submitted a report and these documents are lagging behind the high priority, and in the high priority site we issued the report on January 11th of this year and we are waiting for regulatory comments back on that. The same applied to the seven, low priority AOC's. We are a little bit further behind on that one because they are a lower priority, and we received NYSDEC comments on our draft report. We are waiting for VA comments.

I would like to pursue again to the next stage

of work, the RI/FS work, and give you a status report as to where we stand on work we've been doing along that line. The first site I'd like to discuss is the former Open Burning Ground. This was a SWMU and ended up being a AOC, and we have done an RI/FS on this site, a Remedial Investigation was completed and a document was submitted, final on December 9th. The regulatory folks have accepted the final document. That is also a primary document identified, IAG, or the Federal Facility Agreement, the FFA, and we prepared a Feasibility Study, submitted that on March 10th, received regulatory comments and we are currently in the process of formal consultation with all the parties involved to agree with some type of a cleanup level, and we are getting close to that complex. The Ash Landfill is another site that we performed an RI/FS. The investigation is complete. We submitted the report final in October of '94. Again the Feasibility Study. Performed a Groundwater Modeling Study at that site to evaluate it. The report was submitted for regulatory report on January 4th and Draft-Final, FS for this site was submitted in mid-December, so that those are also primary documents, so we are moving along on that site. Many of the remaining twenty-eight areas of concern that we have slated for RI/FS evaluation, we are writing workplans to evaluate those sites. Basically, what we are

doing is taking site investigation dates that we elected, we are evaluating that and writing a work program and going to a more intensive study and provide enough information that we can determine what remedial activity should be performed there, and as a result of our plans, efforts, we have identified what we call a Generic Workplan. Each of these sites need to have a workplan describing what workplan will be done, and as you may expect, these documents can get pretty hefty, so we have decided to take much of the generic information and put in what we call a Generic Workplan, and that describes such things as how we do drilling work and how we do sampling work and how we do all of these things, would be consistent throughout all the sites, and there is no need of basically redoing all that work. We decided to put all that generic stuff and put in the separate document and prepare what we call a Sketching Plan for all the different sites and just detail the area and locations of where the specific wells and borings are going to be performed at each one of these different sites, so we submitted the Generic Draft Final and it's been recently accepted by EPA and NYSDEC as Final.

Now, as I mentioned, we are preparing what we call -- let me back up for a second. Today we have done six workplans. We have done workplans for six SWMU's,

of which all of these are at the Ash Landfill or the OB Grounds. As I mentioned, we prepared the RI/FS work at these different sites. In addition to that, we are preparing Scoping Workplans that will be a supplement to the Generic Workplan, and here is the status of where we stand on those various workplans. Four are final and complete. I will be discussing with you in a minute the results of the investigation work that we have just completed at SWMU 25 and 26. We have submitted a workplan for doing SWMU 16 and 17, which are the old deactivating furnace and the existing deactivating furnace. We have issued that information for regulatory approval on October 19th of last year. Eight are in the draft stage, which means they have been submitted. We are waiting for comments back and these would include several of the sites that we are planning on doing this year, investigating at Seneca this year, and eight are in the pre-draft, which means still in the Army review stage, and we are waiting for comments back from the Army, and two still under preparation and not yet submitted to the Army for review. In regards to the work we have just been doing, again we are writing a workplan, a scoping plan I should say, and we have just recently completed extensive RI work at the C25 or SWMU 25, which is a Fire Demonstration Pad. And this is a listing of all the activity that we recently

completed, done Soil Gas work and done Soil Gas borings, sampling, monitoring wells, including Bedrock wells, CERCLA's, Ecological Survey, Groundwater Sampling and several various tests for hydraulic information, for determining the hydraulic conductivity of it, and Second Round of Monitoring, and that will be completed shortly. The other site is SWMU, which is the Fire Training Area, and in a similar matter we have basically completed all of the field tests, borings, surface tests, sampling, monitoring, well installations, sampling, First Round of Monitoring Well Sampling and all that information is now coming back from the laboratory. The data that we submitted to the lab is coming to us and we are in the process of validating the data, look at how good the quality of the data is and determining what impact there are at these sites. Following that, the valuation of the data, what we will call risk assessment, that's the point we will move into feasibility analysis, which we will look at various alternatives that are appropriate for mediating the sites.

And I will give you a brief update on some of the Removal Actions, completion records that we have done, as the final topic that I will talk about today. First removal action was performed at the Ash Landfill where soil was removed. There it was all delineated as part of

RI. The Army made a decision to determine the source of this groundwater plume, was fairly well delineated in the RI. They will permit to eliminating this threat early on the process instead of waiting in the signing of the ROD, would be proactive at that site. The objective was to remove the existing threat and eliminate the groundwater and streamline, the RI process. The treatment goals that we have set for this action, with the NYSDEC TAGM, which is a Technical Administrative Guidance Memorandum guide for soil that was established by the New York State people, we excavated thirty-five thousand tons of soil, processed that through a low temperature thermal desorption unit, which essentially heats the soil up to approximately eight hundred to nine hundred degrees fahrenheit, the removal, all of the contaminants in the soil matrix, and then sweeps that material in an available pond station, what we will call a burn pit, which a prior air incinerator that burns the gas and then discharges clean air to the atmosphere. These remedial activities are complete, and currently we are in the process of processing the groundwater to determine what the impact of removing the source of this groundwater at that site, and we will continue to monitor the effects of this effort.

The final item that I will discuss today is the status of several of the other Decision Documents that we

have prepared, and we have prepared basically a Decision Document followed by a plan and specification for excavating or doing whatever we need to do with these sites. These four documents basically Decision Document Plan and Specs, Decision Document Plan and Specs for the various sites here are basically final and complete and pending Army funding, you know, this process will move on.

Is there any question?

MR. ABSOLOM: Thank you. The next item on the agenda is really views and open discussion of the TRC to share and answer any questions or any comments or any concerns, introduce questions, entertain questions at this time. Are there any questions?

MR. SERWINDOWSKI: Can you describe the funding mechanisms and priority?

MR. ABSOLOM: Would you repeat the question, I'm unsure I understand. You would like to know the funding actions for the removing actions? I'm going to defer that to my esteemed colleague from the U.S. Army Environmental Center to explain the funding.

MR. KLIESER: I don't know how far back you want to go into the funding, but I mean, obviously, there's the budget which is passed down from Congress, and the Army, and the Army decides what is going to go through the Environmental, which brings down into what the total Army

Environmental budget, then it's further prioritized within the installation, and site within the installation. It used to be in the past they have by installations, what they have in agreement, where when it was based on agreements with TDPR or any other regulatory bodies, including the State. But now it is based on a relative risk, the desired site, of money is based on relative risk right now, which is a system that we developed to determine how much risk each site relative to the other sites across the nation pose, so at the sites that had Level 1, it was broken down into three levels. Level 1, Level 2 and Level 3. The site posing the most relative risks would be funded first, and so on and so forth down that list, so where ever these sites on Seneca came up on relative risk, they're the ones that received money first and right down -- that is one side of the coin. The other side is the BRAC money, which is handled through a different stovepipe with similar type of action, but it will be a priority placed on each individual site now, so each site may -- one site may get funded and the one next to it, based on conditions, it may not be funded in the same time frame, so anything more specific you may want to ask?

MR. SERWINOWSKI: I just want to know where will the funding come from for the future removal action, do

you know.

MR. KLEISER: It's planned on right now and it's moving toward BRAC, who will be funding the action.

MR. BUCK: It was originally anticipated in the fiscal year '96 for the back '95 site, under that era. However, that is not going to be the case. It is going to be funded out of the BRAC now at this time, and there is a shortfall in that account so the prioritization seems taking on more and more because there is simply not enough money to fill out the BRAC, and that is nationwide.

MS. MC LAREN: I have a question on the RI/FS workplan status for all twenty-eight AFC. I am just trying to get a grasp of what is going on. You said that it has to go back to the Army for review, could you explain to me why it would have to go back to the Army.

MR. KLIESER: I was going to say normally the Army prepares it and the Army will send it out to the various Army agencies that are involved for an internal on the review, and then after we agree we send it out to the regulators, and if the regulators have comments, then it will come back to the Army, not so much for review, but for an incorporation for their comments and corrections, so if I understand your question correctly now, it's not so much it comes back to the Army for review, it comes back to the Army for correction.

MS. MC LAREN: Right, that is what concerns me. Not to discredit the Army, but past history would show there has been situations where the Army is not all together truthful through their findings and report, so how am I as a citizen supposed to feel comfortable knowing that that information that is supposed to be done objectively by outside sources, when it goes back to the Army?

MR. KLIESER: For each comment we receive from the regulators, we are required to provide a detailed response agreement/disagreement, and if we disagree, we tell them how we made the change and what page they can find it on. If we disagree, we tell them why. If they are happy, they then get a chance to review once again. If they're happy with the work they have done, we go on. If not, we have to stay at that point until we get it right according to the EPS on the State, and there are no dishonest people in the Army.

MR. ABSOLOM: Any other questions, concerns.

MR. SERRETT: Seeing that the base, Seneca was taken off the closure list, is that going to have any impact as far as speed of the remediation work?

MR. ABSOLOM: Let me clarify what happens when they said Seneca was taken off fast closure list. The Industrial Command, which is our immediate command above

us, had determined that in order for them to save money, it was beneficial to close installations as quickly as possible, all relative to the availability of funding. What happened was we would -- had developed our plan for BRAC closure based on the concept fast track closure, which means move the stock or community of installation quickly. Unfortunately, the funding issues that have occurred, there is no funding for fast track closure of the installation, so we will extend, the concept, we will extend, of the ability to close or removing the Army stock, for instead of two years, perhaps four years or five years. Those decisions do not -- associated with the environmental fast track. Environmental fast track is set up so governmental issues are resolved in a year, and DEC indicate some fast track. You just have to understand what the difference is -- Top Lodge (phonetic), this was an IOC command -- that didn't happen, and that was what was publicized as Seneca coming off the fast track process. It was not an Army decision at that time, and there is no impact on the environmental.

Any questions? Any other questions or comments, concerns? If not, what I would like to do now is really thank everyone for coming. The next, the TRC, as it's known today, after this meeting, I do not plan to have it exist anymore. The next meeting is a kick-off meeting for

the Restoration Advisory Board, and I can't tell you exactly when that is going to happen. It will be based on a number of applications that we have, the selection process, if necessary, and coming to an agreement with all these who are selected as to what date, what is a mutual agreeable date for everyone, the Restoration Advisory Board member. So with that in mind, I would like to thank everyone for being a member of the TRC and thank people that came in, concerned citizens, for everyone that came, and it's been a pleasure and we will continue that perhaps at a different time, depending on when the RAB Committee itself determines, so if there are no further questions, I would like to conclude the Seneca Army Depot Technical Review Board.

Thank you very much.

* * * * *

CERTIFICATION

I, Mary Dianetti, hereby certify that I reported in stenotype shorthand the Meeting of the Technical Review Committee on the 24th day of January, 1996;

And that the foregoing transcript, herewith numbered pages 1 through 30, are a true, accurate and correct record of those stenotype shorthand notes.

Mary Dianetti

MARY DIANETTI

DATED AT: Rochester, New York

this 7th day of February, 1996.

CONCEPT PAPER
DRAFT

SFIM-AEC-RPO
23 Jan 97

SUBJECT: Technical Peer Review For Environmental Restoration Projects

1.0 INTRODUCTION

This concept paper outlines the rationale and approach to develop a formal technical peer review process for environmental restoration projects. The initial focus of peer review will be on Base Realignment and Closure (BRAC) restoration projects. The technical peer reviews will later be expanded to include review of Installation Restoration projects and may ultimately also be used to review other Department of the Army environmental programs (e.g., Compliance, Pollution Prevention, Conservation). The Peer Review will be a mechanism through which Army installations can obtain outside unbiased technical expertise to ensure the most effective and efficient use of the Army's environmental restoration funds. This outside unbiased input will facilitate the decision-making process.

1.1 PURPOSE

The purpose of the restoration technical peer review is:

a. To evaluate the adequacy of the rationale used to scope and select remedial actions.

b. To ensure the incorporation of a properly-conducted site-specific risk assessment and to ensure the use of a risk-based approach as a remediation decision tool.

c. To evaluate the technical merits of the proposed remedial actions to achieve the stated remediation goals.

d. To provide technical recommendations to improve proposed remedial actions or offer alternative remedies.

An important underlying objective of the peer review is to ensure that the most cost-effective approaches are employed in order to conserve Army environmental funds.

1.2 BACKGROUND

The Air Force and Navy have each implemented peer review programs. There are significant differences between these two programs. There are also differences in how the Army, Navy and Air Force manage the execution of their restoration programs which will impact on how the Army's peer review process is structured.

Encl 1

DRAFT

1.2.1 AIR FORCE PEER REVIEW

The Air Force implemented a structured and formal peer review program nearly four years ago at closing Air Force bases. The Air Force Base Conversion Agency (AFBCA) is responsible for peer review program management at the 33 closing bases. The Air Force Center for Environmental Excellence (AFCEE) conducts the peer reviews at approximately one year time intervals. The AFBCA notifies AFCEE of the projects and BRAC bases to be reviewed, schedules the reviews, consolidates results, and integrates results into the BRAC environmental program. Highlights of the Air Force peer review program are:

a. Peer review is a budgetary process requirement. Peer review is conducted once per year in preparation for the budget submission. Peer review validation documentation must accompany funding requests in order for funds to be released on that project. The Peer Review process is strictly a technical review and recommendations generated from the Peer Review are considered by management in decision-making, taking other factors (e.g., regulatory, political, etc.) into consideration as well.

b. Initially, peer review was conducted on all AFBCA projects where funding in excess of $500K was requested in the FY+1 or FY+2.

c. The Air Force has no oversight program in place beyond the peer review process.

d. A seven page questionnaire is forwarded to the base approximately three months prior to peer review. The base fills out the questionnaire and submits it and any necessary documents for peer review team member examination prior to the peer review.

e. All bases are peer reviewed in a one or two week timeframe at one location, typically San Antonio (i.e., all base project managers (PMs) travel to a central location). Multiple peer review teams are established to review all projects within this timeframe. On average, a project takes four to eight hours to review. The PMs present their projects and interactive discussion follows. In addition to PM attendance, the state and federal regulatory team members are invited and encouraged to attend.

The AFBCA peer review process is currently undergoing some changes due to the growing cleanup requirements in Long Term Monitoring (LTM) and Long Term Operations (LTO). Therefore, in FY97, two bases will undergo a technical assistance visit. The technical assistance visit is an overall program review with a focus on optimizing future long term program requirements and costs. The AFBCA anticipates that the current peer review process described above will transform into the

technical assistance visit process in the future as a majority of their bases requirements move into LTM/LTO.

1.2.2 NAVY CLEANUP TIGER TEAM REVIEW

The Navy implemented cleanup tiger team reviews about two years ago. Highlights of the cleanup tiger team review program are:

a. Tiger team review is strictly a technical assistance mechanism and is not tied to the budgetary process. Since tiger team review is not tied to the budgetary process, it is a continuous and on-going activity throughout the FY. The Tiger Team provides their recommendations on the project to the PMs in the form of a report. It is then the PM's choice whether they wish to institute the tiger team's recommendations. As with the Air Force Peer Review recommendations, they are strictly technical in nature and any decision on whether or not to implement the recommendations is made considering other factors as well (e.g., regulatory, political, etc.).

b. Initially, tiger team review focused on high dollar RD/RA projects and those projects where PMs requested tiger team assistance. Tiger team review is now being broadened to deal with projects throughout the restoration process from strategic planning through the optimization of O&M.

c. The Navy has no oversight program in place beyond the tiger team review effort.

d. Typically, no project information or documentation is obtained and distributed to the tiger team prior to the review.

e. As opposed to bringing all the PMs together at one location, the tiger team visits the Navy's eight Engineering Field Divisions (EFDs). All EFD projects meeting the review criteria are examined over a two week period. 460 sites were reviewed during the first year of tiger team reviews. In the initial tiger team meeting, regulators are typically not invited. Follow-up tiger team or specific team member assistance is offered to the PMs. Regulators can be present and involved at those meetings.

1.3 RECOMMENDED ARMY PEER REVIEW APPROACH

The Army already has an integrated environmental restoration oversight program which is managed at the U.S. Army Environmental Center (USAEC). This continuous oversight program provides budgetary, management, and technical assistance to both the Base Realignment and Closure (BRAC) and Installation Restoration (IR) environmental programs. Neither the Navy nor the Air Force has a similar oversight

program in place. The peer review process, which takes place on an annual basis, is their oversight process.

Peer review will effectively complement and enhance the Army's oversight program. Through this enhanced oversight program, significant cost savings are expected. The greatest benefit could be obtained from peer review as a technical assistance mechanism at those projects where the MACOM or installation needs technical assistance in selecting or improving upon a solution or where an independent technical third party opinion is needed to aide in negotiations with the regulators and/or restoration advisory board.

1.3.1 PROJECT SELECTION CRITERIA

Since the peer review process is envisioned as an in-depth review, all BRAC projects will not undergo review. In fact, only a few projects will be reviewed in FY97 on a pilot test basis. Since there are limited resources which may be used for peer review, it is important to maximize the benefit of the peer review and focus on those projects with the greatest potential return on investment. It is also important to note that the listed project selection criteria are recommended to serve as general guidelines and not "hard and fast" requirements. The following criteria are proposed:

a. Site Type: The project must occur at a BRAC site. As stated in the introduction, the initial focus of peer review will be on BRAC restoration projects. The technical peer reviews will later be expanded to include review of Installation Restoration projects and may ultimately also be used to review other Department of the Army environmental programs (e.g., Compliance, Pollution Prevention, Conservation).

b. Project Phase: The project should be entering the RD/RA phase in FY+1 or FY+2. The technical and cost benefits of peer review could be maximized by applying it to the entire restoration process. Therefore, following the peer review pilot tests, the project phase should be broadened to deal with projects scheduled for FY+1 and FY+2 throughout the restoration process from strategic planning to the optimization of O&M.

c. Funding Requirement: Projects which exceed $2M should be subject to peer review. This dollar threshold was selected for two basic reasons. First, decision document signature authority resides at the MACOM for restoration projects greater than $2M and less than $6M while DA retains signature authority on restoration projects greater than $6M. Therefore, all actions requiring authorization above the installation commander would be peer reviewed. Secondly, there are 30 BRAC installations with more than 100 sites having a

cost-to-complete in excess of $2M. Initially, peer review can not practically be accomplished on a greater number of projects. Multiple data sources will be examined to identify projects which meet this criteria. The EPRs and workplan will be examined to determine in which fiscal years the specific project phases occur. The cost-to-complete database will also be examined to determine which sites will exceed the $2M threshold due to significant operations and maintenance or long-term monitoring costs through project completion.

d. Selected Technology. The Army encourages the use of specific technologies including innovative technologies. There are technologies which may be selected which will not be subject to peer review. Conversely, there are technologies which, if selected, will subject the project to a peer review. For example, if the media of concern is groundwater and the selected technology is natural attenuation, a peer review may not be conducted on the project. If, however, the selected technology is groundwater extraction and treatment, the project is likely to be peer reviewed. For soil, a project where incineration has been selected for implementation will likely draw a peer review while in-situ soil treatment may not be subject to peer review.

e. Cleanup Driver. A project may not be subject to peer review if an action is being taken due to a potential excess risk for the current land use. Conversely, a project may be subject to peer review if an action is driven by a potential excess risk for a possible future land use or the exceedance of an Applicable or Relevant and Appropriate Requirement (ARAR).

f. If the project does not meet criteria b through e, but the Department of the Army BRAC Office (DA BRACO, the MACOM, the installation, or the USAEC oversight project manager believes that a project could benefit from an independent third party evaluation, any of those parties can nominate it. If the regulators are pushing for an excessive action, peer review results could help the installation in negotiations. While the peer review process will initially focus on RD/RA, it will also be available, upon the request of DA BRACO, the MACOM, the installation, or the USAEC oversight project manager, to examine Remedial Investigation/Feasibility Study RI/FS) approaches.

1.3.2 PEER REVIEW FORUM

In order to peer review all projects exceeding the $2M funding threshold, the appropriate review structure will be established based on a three-tiered approach. This will ensure that the level of peer review applied to an installation is consistent with the complexity and potential return on investment.

1.3.2.1 Level 1. Level 1 reviews will be conducted at the installation being reviewed. This would typically be applied to installations which include five or more projects which meet the peer review criteria for the FY+1 to FY+2 time period. Based on the level of review required for such installations, site visits are considered cost effective and necessary.

1.3.2.2 Level 2. Level 2 reviews will be conducted at a central location (e.g., MACOM or Major Subordinate Command (MSC)) and will cover multiple installations. Installations involved in Level 2 reviews will typically have fewer than five projects which meet the peer review criteria for the FY+1 to FY+2 time period. With fewer projects per installation, several installations can be reviewed during the course of the peer review, thereby maximizing the use of the peer review panel.

1.3.2.3 Level 3. Level 3 reviews will be conducted via telephone conference where an installation may not have projects which meet the minimum criteria but which require an independent evaluation.

As stated previously, there are 30 BRAC installations with a total of more than 100 sites having a cost-to-complete in excess of $2M. The majority of installations have between one and five sites with associated funding requirements greater than $2M. A few installations have a large number of sites that meet this criteria. For example, one installation has 20 sites with funding requirements in excess of $2M.

In order to be successful, the installation and MACOM must perceive the peer review concept as an asset instead of another bureaucratic exercise which must be performed to comply with program requirements and obtain or maintain funding. The peer review process should also be as "installation-friendly" as possible and should ideally be performed as a technical assistance visit to the installation. By traveling to the installation, installation travel and inconvenience would be minimized, cooperation would be promoted by allowing the installation staff to have "home field advantage", and the peer review team would have the opportunity to visit the site(s) and access any documents which could have been left behind if the installation staff were traveling to another location. By requiring installations to travel to a central location one time per year to gain validation, the peer review may be negatively perceived as being tied directly to the funding cycle and purely a cost cutting exercise. Therefore, using the three-level approach, site visits can be used where it is cost effective and a high level of review is needed and the remainder of the reviews can be conducted at the MACOMs/MSCs. The level 3 reviews will be handled on a case-by-case basis to meet the needs of the installations and MACOMs.

1.3.3 PEER REVIEW TEAM MEMBER COMPOSITION

The technical peer review panel will be selected based on a broad knowledge of all aspects of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) remediation programs as well as specific expertise in the remedial technologies under consideration. Expertise areas include chemistry, cost estimation, environmental engineering, environmental law and regulation, geology, hydrogeology, project management, remediation technologies, and risk assessment. The core panel will consist of technical experts identified from the U.S. Army Environmental Center (USAEC) and the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM). This core panel Will be augmented, on a project-specific basis as necessary, by technical experts from the U.S. Army Corps of Engineers (USACE) including USACE laboratories, state and federal regulatory agencies and laboratories, and academia. The peer review panel will consist of the following:

a. Peer Review Coordinator: The overall coordinator for the peer review. This coordinator oversees the entire peer review process; coordinates planning, organization, scheduling, and implementation of the peer review process, determines appropriate project-specific team composition; ensures adequacy of the peer review information package; ensures completion and distribution of the peer review recommendations; and consolidates and distributes lessons learned. Peer review recommendations and lessons learned will be distributed to the installation, the Major Command (MACOM), and the Department of the Army BRAC Office (DA BRACO). The coordinator will also be responsible for briefing the MACOM and/or DA BRACO on the results of the peer review, as requested.

b. Peer Review Facilitator: A peer review facilitator will be selected by the peer review coordinator. As moderator, the peer review facilitator will ensure an "on task" and "on time" schedule. The facilitator will direct the peer review team and will not allow it to be "derailed" by other subjects.

c. Core Peer Review Panel Member: The Chief, Environmental Restoration Division, USAEC, will identify core members from the disciplines of engineering, environmental law, geology/ hydrogeology, remediation technology, and risk assessment. These members will be regular (core) members of the peer review panel and will be identified primarily from USAEC and USACHPPM resources. Panel members will not be allowed to participate in evaluations of projects with which they are directly associated to ensure unbiased recommendations.

d. Project-specific Member: The Peer Review Coordinator will determine special technical expertise required to adequately review project-specific issues and provide constructive input to recommended solutions. The Peer Review Coordinator will request participation of

outside agencies through the Chief, Environmental Restoration Division. Potential sources of special technical expertise for various technical issues are:

(1) Groundwater Modeling - Waterways Experiment Station, USACE.
(2) UXO - Huntsville Division, USACE.
(3) ARARs - Oakridge National Laboratories.
(4) Innovative Technology - USEPA.
(5) Chemistry - USAEC

1.3.4 INFORMATION REQUIREMENTS

The environmental staff at a typical BRAC installation is constrained and often unable to carry out significant additional tasks. Responding to lengthy questionnaires and preparing to brief and defend environmental projects is indeed significant additional work. The installation's environmental staff will be required to prepare for meeting with the peer review team; however, steps will be taken to minimize the effort involved. The installations will be required to complete and submit questionnaires in a timely manner so that the peer review team can gain a basic understanding of the project prior to the meeting. To minimize installation efforts, questionnaire responses will be drafted by the USAEC oversight project manager. The draft responses can be forwarded to the installation to check accuracy and completeness. The installation will then be responsible for completing and submitting the questionnaires to the peer review coordinator and copy furnishing their MACOM and DA BRACO. Following the pilot test peer reviews, questionnaire requirements will be further defined.

1.3.5 ESTIMATED FUNDING REQUIREMENTS

Preliminary cost estimates have been prepared for both the site visit peer review and the central/MACOM visit peer review on a per installation basis. Pilot peer reviews will be conducted as outlined below in section 1.3.8. Following the pilot reviews, the peer review concept will be evaluated and more detailed cost estimates will be prepared. Assumptions and dollar estimates are provided below.

1.3.5.1 SITE VISIT ESTIMATE

The assumptions, per installation, made in preparing this cost estimate are:

a. Forty hours are required for peer review coordinator preparation.

b. Forty hours are required for the installation to prepare responses to questionnaires and to prepare the project briefing.

c. Eight hours per peer review team member are required to review the submitted information packet and to prepare for the meeting.

d. The actual peer review technical assistance visit will take 4 days, including travel time.

e. Three installation representatives and eight peer review team members (including two project-specific members employed by outside agencies) will be present at the peer review meeting. Labor for project-specific members employed by outside agencies is not included, but travel costs are included.

f. Eighty hours are required for report preparation and follow-up briefings.

g. Loaded labor rates are as follows:

- Installation personnel: $55/hour
- USAEC personnel: $60/hour
- Peer review team member: $80/hour

h. Travel costs, including airfare and per diem, were estimated as $1,500 per person.

Based on these assumptions, the estimated per installation cost for performing a site visit peer review is $46K.

1.3.5.2 CENTRAL/MACOM VISIT ESTIMATE

The assumptions, per installation, made in preparing this cost estimate are:

a. Four installations will be peer reviewed at the central/MACOM visit. Therefore, twenty-five percent of the travel cost is allocated to each installation.

b. Eight hours are required for peer review coordinator preparation.

c. Forty hours are required for the installation to prepare responses to questionnaires and to prepare the project briefing.

d. Eight hours per peer review team member are required to review the submitted information packet and to prepare for the meeting.

e. The actual peer review technical assistance visit will take ten hours per installation including travel time (eight hours for the peer review meeting and two hours travel time for each of the four installations).

f. Three installation representatives and eight peer review team members (including two project-specific members employed by outside agencies) will be present at the peer review meeting. Labor for project-specific members employed by outside agencies is not included, but travel costs are included.

g. Forty hours are required for report preparation and follow-up briefings.

h. Loaded labor rates are estimated as follows:

- Installation personnel: $55/hour
- USAEC personnel: $60/hour
- Peer review team member: $80/hour

i. Travel costs, including airfare and per diem, were estimated as $1,500 per person. Twenty-five percent of the travel cost is allocated to each installation.

j. The estimated fee for the meeting room is $1,000. Again, twenty-five percent of this fee is allocated to each installation.

Based on these assumptions, the estimated per installation cost for performing the central/MACOM visit peer review is $23K.

1.3.6 PEER REVIEW TEAM RECOMMENDATIONS/RESULTS

The primary goal of the peer review will be to provide technical assistance to the installation. The peer review team will focus on the technical merit of the project at hand. By evaluating the technical merit of a project, cost savings will likely result. The peer review meetings will be performed year-round as an integral part of the restoration oversight effort and as needed in support of the upcoming funding cycle.

The peer review group will provide advice and recommendations to the installation, MACOM, and DA BRACO strictly on a technical basis. The current decision makers will continue to decide whether a project warrants funding. Since the peer review group will make recommendations based strictly on technical merit, the current decision makers may need to consider political factors prior to determining whether or not to fund a project even if the peer review recommends that the project be modified or terminated. Recommendations from the peer review will be one additional factor to be considered in decision-making.

1.3.7 FY97 INITIAL PEER REVIEW PILOT TEST

The concept outlined above will be tested during the FY97 initial peer review pilot test. Four installations will be peer reviewed. Ideally, two installations will undergo level 1 reviews while the other two will undergo level 2 reviews as defined in section 1.3.2 above. In this manner, both the site visit and central/MACOM visit style of peer reviews will be evaluated.

TECHNICAL PEER REVIEW GUIDANCE

PEER REVIEW GUIDANCE

PEER REVIEW PROCESS

PEER REVIEW PROCEDURES

Encl 2

PEER REVIEW PROCEDURES
(MAR 1997 REVIEW)

1. The San Antonio, Tx peer review will take place at the Holiday Inn Northwest, San Antonio. Reservations can be made by calling (210) 377-3900 and asking for the "AFCEE Peer Review" block of rooms. The McClellan AFB , CA Peer Review will be held in Building 269D at McClellan AFB, CA. Contact Ms. Debra Sparks at (916) 643-1742, ext 336 for billeting reservations at McClellan.

2. The Peer Review Coordinator is Mr. Logos Yuen, DSN 240-5246 or commercial (210) 536-5246. If you have any challenges with the procedures, documents, food, bathrooms, heat, cold, etc, please see him or his designated representative (to be announced each morning at the Combined Session).

3. Introductory /Combined Sessions (0730-0830 each morning)– Briefings will be held by AFBCA and AFCEE staff regarding the goals, objectives and procedures of the Peer Review (PR). Any administrative announcements needed to be made will also be made during this time. All Peer Review Team members and participants must be present if you are scheduled for Peer Review that day. For the San Antonio Peer Review breakfast is available (Tuesday through Thursday) from the Hotel prior to 0730.

4. Agenda and Procedures – Breakout Sessions (0830-1200 and 1300-1730) for each base – Location as posted – The Peer Review Team Facilitator for each base will ensure that the team remains on task and on time. The Facilitator directs the Team and does not allow it to be sidetracked by other subjects. The Team elects a Recorder who shall take notes on items discussed.

a. Base Overview/History Briefing – BEC/BCT

b. Project briefings & technology selection – BECs/BCTs will brief each project to the Peer Review Team and be prepared to discuss each project in detail.

c. Peer Review discussions, questions etc - Peer Review Team Members

d. Completion of Peer Review Validation Form (PRVF) for each project discussed - Peer Review Team Members

e. Development of consensus statement and summary PRVF - Peer Review Team Members. PRVFs will be completed and signed by each reviewer. Signing the form does not mean that the Reviewer necessarily concurs with the Team consensus.

f. Individual PRVFs will be attached to the Summary PRVF as supporting documentation for the final product. Once a Sumary PRVF has been completed, give a copy of the document, on disk, to the Peer Review Coordinator for printing.

5. Team Composition is included in each base packet and is posted at each Peer Review room.

6. Peer Review validation is focused around the following questions:

a. Is the technology the most cost effective alternative that is protective of human health and the environment?
b. Is the technology consistent with the AFCEE technology matrix?
c. Is the technology identified and is the level of effort consistent with the cost estimates?
d. Has cost estimates been broken out by site and the selected technology for each identified?
e. Was the cost estimate prepared using RACER? If not, how was it prepared?
f. Were life cycle costs computed? Were they identified in outyear requirements?
g. Was the selected technology consistent with the reuse requirements?
h. Does the 1391/Narrative adequately describe the project requirements and costs?
i Are LTM/LTO objectives and costs optimized for site conditions/cleanup standards?

7. Project descriptions must be detailed enough so that a reviewer, unfamiliar with you proposal, can answer the following questions:

a. What the project plans to accomplish
b. When the project will be completed
c. When the project needs to be completed
d. What is the rationale for the project (including why this is the "best" alternative)?
e. What will happen if the project is not completed?
f. What major cost elements make up the total project cost?
g. How firm is the requirement and cost estimate?

PEER REVIEW
INFORMATION REQUIREMENTS

DUE TO: USAEC and DA BRACO **NLT 13 FEB 97**

√ PEER REVIEW INFORMATION REQUIREMENTS CHECKLIST
(This list contains all information requirements that must be forwarded to USAEC and DA BRACO)

√ PEER REVIEW BRIEFING AGENDA

√ PEER REVIEW PROJECT QUESTIONNAIRE

MAIL TO: COMMANDER, USAEC
ATTN: SFIM-AEC-RPO (MR. ROBERT SNYDER)
ABERDEEN PROVING GROUND, MD 21010-5401

COPY TO: HQDA
ATTN: DAIM-ED-R (MS. ROBIN MILLS)
ACSIM
600 ARMY PENTAGON
WASH D.C. 20310-0600

PEER REVIEW INFORMATION REQUIREMENTS CHECKLIST

_____ Submit Program Documentation (i.e. Project Narratives) on all projects to be Peer Reviewed to USAEC and DA BRACO by 13 Feb 97.

_____ Submit Peer Review Questionnaire on all projects requiring Peer Review to USAEC and DA BRACO by 13 Feb 97.

_____ Identify supporting material needed for Peer Review. Where appropriate provide to USAEC by 13 Feb 97.

_____ Notify BCT members of Peer Review dates. Extend invitation to attend Peer Review.

_____ Prepare Agenda for your Peer Review.

_____ Prepare program overview briefing (See attached briefing agenda outline). Briefing must convey:

Reuse Plan
Cleanup Status
Cleanup Plans/Milestones

(Bring at least 20 copies of your briefing slides)

_____ Prepare briefing slides on each project to undergo Peer Review. Briefing should convey:

Project Schedule/Milestones
Existing Site Characterization Condition
Reuse Implications
Risk Assessment
Past Performance/Technology Selection Rationale
Cost Estimates (Basis for cost estimates)
Initiatives to Reduce Cost
Summary

_____ Bring supporting materials (maps, conceptual site models, RI/FS report, risk assessment report) to Peer Review.

PEER REVIEW BRIEFING AGENDA

Date: **Installation:**

1. Installation Overview (BEC)

2. Project Peer Review
   A. RI/FS Strategy Overview
      - RI/FS Projects:

   B. RD/RA Strategy Overview
      - RD/RA Projects:

   C. LTO/LTM Strategy Overview
      - LTM/LTO Projects:

3. Identify name, address, and phone number of BCT attendees of Peer Review:

EPA: STATE: Army:

4. Identify if you need:

_____ 35mm _____ Overhead _____ Other needs

PEER REVIEW GUIDANCE DOCUMENT
(Draft: ver 1.2)

INTRODUCTION: DoD and USAF Air Staff initiatives direct that peer reviews be conducted for environmental remediation projects or environmental studies prior to consideration in the annual funding program. Peer reviews assess the technical appropriateness of proposed remediation technologies, closure-related compliance remediation projects, and environmental studies conducted preliminary to such remediations. The peer review process is not a specifically defined step in CERCLA or RCRA processes. These require feasibility studies and corrective measures studies, respectively, before selecting a remediation technology. To that end, innovative technologies are to be encouraged whenever possible. HQ AFCEE/ERC is appointed as the Air Force OPR to develop and maintain the peer review program. This document: describes the purpose of a peer review; provides guidance for preparing for a peer review; defines the roles and responsibilities for the peer review participants; describes the steps required to complete a peer review; and reviews and transmits to installations the lessons learned from previous peer reviews.

PURPOSE:

The purposes (MITRE, 1994) of the Peer Review (PR) are fourfold:

1. Evaluate the adequacy of the rationale used to scope and select on-going remedial actions.

2. Ensure incorporation of a properly-conducted, risk-based approach as a remediation decision tool.

3. Validate the technical merits of the proposed remedial actions to achieve the stated remediation goals.

4. Provide validation documentation to accompany funding requests and/or technical recommendations to improve proposed remedial actions.

ROLES AND RESPONSIBILITIES:

1. HQ AF/CEVR: Provides policy directives and guidance and final project validation for funding approval.

2. Air Force Base Realignment and Closure Agency (BRAC) Program Manager: Provides policy directives and guidance and final project validation for funding approval.

3. Air Force Major Command (DERA) Program Manager: Provides intermediate policy guidance and project validation.

4. Base Program Manager (DERA) or the BRAC Environmental Coordinator (BEC):

   a. Carefully plans for the Peer Review and anticipates the requirements identified in this document.

   b. Utilizes this Peer Review Guidance Document during all phases of the IRP to prepare for Peer Reviews.

   c. Initiates request for a Peer Review of selected remedial technologies and/or environmental studies to the AFCEE Team Chief.

d. Prepares the Peer Review Information Package (PRIP).

e. Incorporates the Peer Review evaluations into the existing Management Action Plan or Base Closure Plan and revises DD 1391s and Narratives.

5. Remedial Project Team (RPT) is defined as Base Program Manager (DERA) or the BRAC Environmental Coordinator, Base environmental personnel, and the AFCEE support team (Team Chief and ancillary personnel):

6. HQ AFCEE/ERB and ERD Team Chief:

a. Notifies the Peer Review Coordinator that a Peer Review has been requested by the Base and coordinates the PR schedule.

b. Coordinates preparation of the Peer Review Information Package.

7. HQ AFCEE/ERC Peer Review Coordinator (PRC) is responsible for successful completion of the Peer Review (see below). The PRC is responsible for scheduling meeting space, lodging, administrative support, supplies, and other resources necessary to complete the Peer Review.

8. HQ AFCEE/ERC, ERT, and JA provides technical expertise to the Peer Review Team.

9. Peer Review Team (PRT) evaluates the PRIP and makes recommendations for funding via the Peer Review Validation Form (see Team Composition and Function)

TEAM COMPOSITION and FUNCTION: The Peer Review OPR is HQ AFCEE/ERC. The Peer Review Team (PRT) is selected based on a broad knowledge of all aspects of CERCLA and RCRA remediation programs and specific expertise in the remedial technologies under consideration. Expertise areas include chemistry, hydrology, geology, environmental engineering, risk assessment, remediation technologies, project management, cost estimation, environmental law and environmental regulation. The core PRT consists of technical experts identified primarily from HQ AFCEE. The PRT will be augmented, as required, with technical experts from the AF Civil Engineering Support Agency (AFCESA), the Armstrong Laboratory, the Systems Engineering and Technical Assistance (SETA) and General Systems Engineering and Integration (GSE&I) contractors, and state and federal regulatory personnel. When possible, technical augmentees will be paid from AFCEE funds. When AFCEE is unable to support the peer review with in-house government or contractor personnel, major commands may be asked to fund other contractor personnel as required to complete the peer review task.

The PRT shall consist of the following:

1. Peer Review Coordinator (PRC): The overall coordinator for the Peer Review. The PRC oversees the entire PR process; coordinates planning, organization, scheduling, and implementation of the PR process; determines project-specific team composition; ensures adequacy of the Peer Review Information Package; ensures completion and distribution of the Peer Review Validation Form; and consolidates and distributes lessons learned. As requested, the PRC will brief the Major Command or BRAC on the results of the Peer Review.

2. Core Member: The Chief, Consultant Operations Division (HQ AFCEE/ERC), shall identify core members from the disciplines of chemistry, engineering, hydrology, risk assessment, remediation technology, and environmental law. These members shall be regular

(core) members of the PRT and will be identified from HQ AFCEE/ERC, ERT, and JA resources.

3. Invited Team Member: Peer Review Team members from AFCESA and Armstrong Laboratory (AL/OEMH) with special expertise (human health exposure assessment, ecological risk assessment, cost evaluation, or a specific technology) may be called upon to participate. As determined by the need for specific expertise, the PRC will select team members suited to particular peer review projects. These members will serve as another level of "disinterested party" involvement in the PR process. Team members may be obtained from the AFCEE support contractors (SETA and GSE&I) and the US Environmental Protection Agency. As needed, nationally recognized technical experts, other than those listed above, may be asked to participate in the PR process.

4. Facilitator: As determined by the PRC, a PRT facilitator shall be selected for each PR session. The facilitator is selected from the PRT members and, as moderator, ensures an "on task" and "on time" schedule. The facilitator directs the PRT and does not allow it to be "derailed" by other subjects.

5. Recorder: When possible, a professional steno/recorder is used to record the proceedings. At a minimum, the PRC and Facilitator will appoint a member of the PR team to serve as recorder. This individual will record the major points and rationale which support the final recommendations on the Peer Review Validation Form. Ideally, the minutes of the PR meeting should be recorded on electronic media and subsequently maintained in permanent files of the installation and AFCEE.

PROJECT PLANNING TO ENSURE A VALID PEER REVIEW:

In preparing for a Peer Review meeting, members assume that the requisite studies (upon which further studies or RD/RA activities are based) have been completed. However, to ensure that all information is available to the PRT during the peer review, the Remedial Project Team must complete the Peer Review Questionnaire (atch 1) as an aid to identification of pertinent data from source documents. Further, assumptions included with RACER estimates should be incorporated into the PRIP documents to facilitate preparation of required RACER estimates.

PROJECT QUALIFICATION:

Peer reviews are not limited to technology validation and may be requested at any time in the Installation Restoration Program (IRP) process. Optimal times include (1) at draft SI phase for an IRA, (2) at draft FS phase for an RD/RA, and (3) at draft SI phase for a RI/FS. Base Project Managers or BECs may initiate a peer review and/or technology validation by identifying the projects to the AFCEE Team Chief. The AFCEE Team is encouraged to be familiar with peer review requirements to help ensure that all required information/data is collected and presented during all study phases.

PEER REVIEW INFORMATION PACKAGE:

The Peer Review Information Package shall contain the following:

1. Site characterization information:

   a. History of site operations

b. Conceptual Site Model (CSM)

1) Site Characteristics to include topography, precipitation, temperature, geology, hydrology, geotechnical/ geophysical, acquifer characteristics

2) Nature and extent of contamination; e.g., contaminant type, contaminant source, analytical data presentation, extent of contamination

3) Contaminant migration pathways that describe soil migration pathway (surface or subsurface), surface water migration pathway, groundwater migration pathway, air migration pathway

4) Receptor populations (human and ecological)

2. Completed baseline risk assessment document (RI/FS) which includes risk attributable to Air Force activity

a. Human risk assessment

b. Ecological risk assessment

c. Residual risk after remediation action is completed

3. Technology selection information

a. Technology description

b. Advantages and disadvantages of the proposed technology (including treatment threshold)

c. Alternatives (see AFCEE Technology Matrix (atch 2))

1) Discuss what alternatives were considered

2) Rationale for exclusion or inclusion of a particular technology should discuss but not be limited to the following:

a) land use planning

b) community reuse scenarios

c) regulatory concerns

d) risks generated by each potential remediation scenario

e) appropriateness of remediation technologies

f) risk reduction to be realized by each remediation technology

g) life cycle costs (including capital and O&M costs based on RACER or other identified estimates)

h) effects of doing nothing

4. Non-technical issues

a. Federal Facilities Agreements

b. Operable Unit strategy

c. Applicable or Relevant and Appropriate Requirements

d. Stakeholder Concerns

e. Native American (Tribal) Concerns (where applicable)

f. Property Transfer Considerations (BRAC)

g. Regulatory agency preferred technologies

h. Corporate preference or non-preference of proposed projects and/or technologies

PEER REVIEW VALIDATION FORM:

The Peer Review Validation Form (atch 3) summarizes the Peer Review Information Package and ensures that the proposed actions are risk-based, technically-sound and cost-appropriate. The completed validation form is given to each Base Program Manager or BEC who then prepares and/or revises funding documents based on recommendations provided in the Peer Review Validation Form. Revisions are forwarded to the appropriate headquarters. The validation form provides both a Validation Checklist and Recommendations section.

1. The Validation Checklist consists of the following questions:

a. Technology consistent with situation and conditions?

b. Technology consistent with AFCEE technology matrix?

c. Technology and level of effort consistent with cost estimates?

d. Cost estimate broken out by site and technology?

e. Cost estimates prepared by RACER?

f. Life cycle costs computed? Costs identified in the outyears?

g. Technology consistent with reuse requirements?

h. 1391/narrative adequately describes the requirement and cost?

2. The Recommendations section consists of the following choices:

a. Validate current project and cost.

b. Validate current project; reevaluate cost estimates.

c. Validate alternate technology and associated cost (summarize proposed alternate technology and level of effort).

d. Hold pending additional information (summarize information required to complete project validation).

e. Cancel: Project unnecessary.

f. Schedule out-of-cycle peer review.

PEER REVIEW MEETING ROADMAP:

1. <u>Preparation</u>:

a. The Base environmental coordinator/manager or the BRAC Environmental Coordinator (BEC) initiates the Peer Review by formal request to the AFCEE Team Chief. The TC coordinates with the PRC to

establish a schedule and location for the Peer Review and informs the Base project leader.

b. Scheduling of the Peer Review is dependent on:

1) establishing a completion date for the Peer Review Information Packet (PRIP)

2) determining the adequacy of the PRIP for the intended Peer Review.

c. The RPT prepares the PRIP and submits it to the PRC at least four weeks prior to the Peer Review. Tools which may facilitate this preparation include the PR questionnaire (atch 1). The RPT prepares the appropriate number of copies of the PRIP.

d. The PRC evaluates the PRIP for adequacy, assigns a control number, and provides a copy of the complete package to each team member at least two weeks prior to the Peer Review. For complex projects, the RPT should transmit the PRIP to team members as far in advance of the Peer Review as possible.

e. The PRC notifies the TC (in writing) and identifies which PRIPs are incomplete for Peer Review purposes, provides a brief description of the existing deficiencies, and includes specific recommendations to correct them. The TC coordinates with the PRC to resolve deficiencies and allow the Peer Review to proceed.

f. The peer review process will be suspended when it is determined that an inadequate PRIP has been submitted. The PRC will coordinate such suspensions with AFCEE/ER and Division Chiefs.

2. Schedule and Location: The PRC identifies team members, schedules the date, time, and location of the Peer Review, and coordinates travel arrangements. Scheduling of government or contractor personnel attending the Peer Review in support of the RPT are the responsibility of the RPT. The most cost-effective option will generally dictate the location of the PR meeting.

3. Agenda: Together with the PRIP, the PRC publishes and distributes an agenda for the Peer Review which contains the following items:

a. Introductions - The PRC introduces the Remedial Project Team members, PRT core members, invited PRT members, the Facilitator, the Recorder, and any invited guests.

b. Process overview and goals - The PRC, in coordination with the Facilitator, reviews the PR process, discusses the overall goals, and provides guidance on the procedures with those in attendance.

c. PRIP presentation and technology selection - The Remedial Project Team presents a briefing for each project being reviewed. The presentation should address those questions found on the questionnaire (atch 1) and provide any additional information which supports the proposed technology and costs. Multiple sites should be briefed separately.

d. PRT discussions - The Facilitator orients and directs the discussion of the material presented by the RPT ensuring that all concerns are addressed.

e. Peer Review Validation Form completion - The Peer Review Team completes the Peer Review Validation Form with the assistance of the Facilitator and PRC.

f. Adjourn - The Facilitator adjourns the meeting.

4. Meeting:

a. The PR meeting includes representation from the following:

1) Remedial technology proponent(s) - The RPT

2) Remedial technology reviewers - the PRT

3) Facilitator

4) Invited stakeholders and guests (Air Force, AFCEE, AFBCA, and EPA, state, and local regulators)

b. Members of the RPT are expected to:

1) Be completely familiar with the project

2) Brief the project using visual aids ensuring all elements impacting the proposed remediation or study are included

3) Actively participate in the PR meeting.

c. Contractor support (at the Peer Review meeting) for the base projects being reviewed is at the discretion of the Base Program Manager (DERA) or the BRAC Environmental Coordinator (BEC). Funding for contractor support is the responsibility of the Base Program Manager (DERA) or the BRAC Environmental Coordinator (BEC).

d. The PRT evaluates the Peer Review Information Package for adequacy of the rationale used to select and scope the proposed studies and/or remedial alternatives. Special attention should be given to the risk considerations for sites proposed as "no further action." The PRT should review site data and ensure that the Conceptual Site Model (CSM) adequately depicts all sources, pathways, and receptors. Remedial technology proponents should be prepared to discuss the CSM in detail. The cost/benefit for human health and ecological risk factors represented by an alternate technology should be considered by the PRT. Recommendations that an alternate technology be used must be fully justified based on risk and cost considerations. "Data gaps" in the PRIP, that result in PRT recommendations to gather additional information prior to project validation, must be fully described. The PRT should also note operational reviews which it deems necessary to be conducted. Also, the PRT must be mindful that the risk management decisions incorporated into the proposed remediation may be driven by factors other than risk or cost. Frequently, various elements of the studies and remediation selection processes have been affected by subjective influences of stakeholders, government, contractors, and/or regulatory personnel.

e. Product: The Peer Review Validation Form is completed for each project through consensus of the PRT. Each PRT member must sign the validation form. Exceptions to the group consensus will be explained on the form. Copies of the Peer Review Validation Form will be distributed to the Base Remedial Project Team leader, HQ AFCEE/ER, AFBCA (as appropriate), HQ AF/CEV (as appropriate), and others as directed and appropriate.

POSSIBLE PHASES OF THE REVIEW PROCESS:

1. Phase One: Document preparation, submittal, and validation by the PRC.

2. Phase Two: Team members review the questionnaires, 1391s, narratives and other project documents (MAP, BCP, CSM, etc). The rationale for the technology selected is critiqued based on risk to human health and the ecology, technical soundness, and cost effectiveness. Only projects which meet these criteria will be validated for remediation funding.

3. Phase Three: For projects which require additional information to be properly validated, teleconferences may be scheduled to discuss rationale, cost considerations, or risk issues. It is anticipated that only a few projects will require Phase Two attention.

4. Phase Four: In a few instances, further study of the documents and proposed technologies may be required. After sufficient time has been provided, the PRT will reconvene through a meeting or telephonically to complete the validation process.

LESSONS LEARNED: to be incorporated from previous peer reviews.

LIST OF ACRONYMS:

1. AFCEE -- Air Force Center For Environmental Excellence
2. AFCESA -- Air Force Civil Engineering Support Agency
3. AL/OEMH -- Armstrong Laboratory
4. BRAC -- Base Realignment and Closure Agency
5. BEC -- BRAC Environmental Coordinator
6. CERCLA -- Comprehensive Environmental Response, Compensation, and Liability Act of 1980
7. DERA -- Defense Environmental Restoration Account
8. GSE&I -- General Systems Engineering and Integration contractors
9. IRP -- Installation Restoration Program
10. PR -- Peer Review
11. PRC -- Peer Review Coordinator
12. Peer Review Guidance Document (this document)
13. PRIP -- Peer Review Information Package
14. PRT -- Peer Review Team
15. RCRA -- Resource Conservation and Recovery Act
16. RPT -- Remedial Project Team
17. SETA -- Systems Engineering and Technical Assistance contractor
18. TC -- AFCEE Team Chief

ATTACHMENTS:

1. Peer Review Questionnaire
2. Peer Review Validation Form

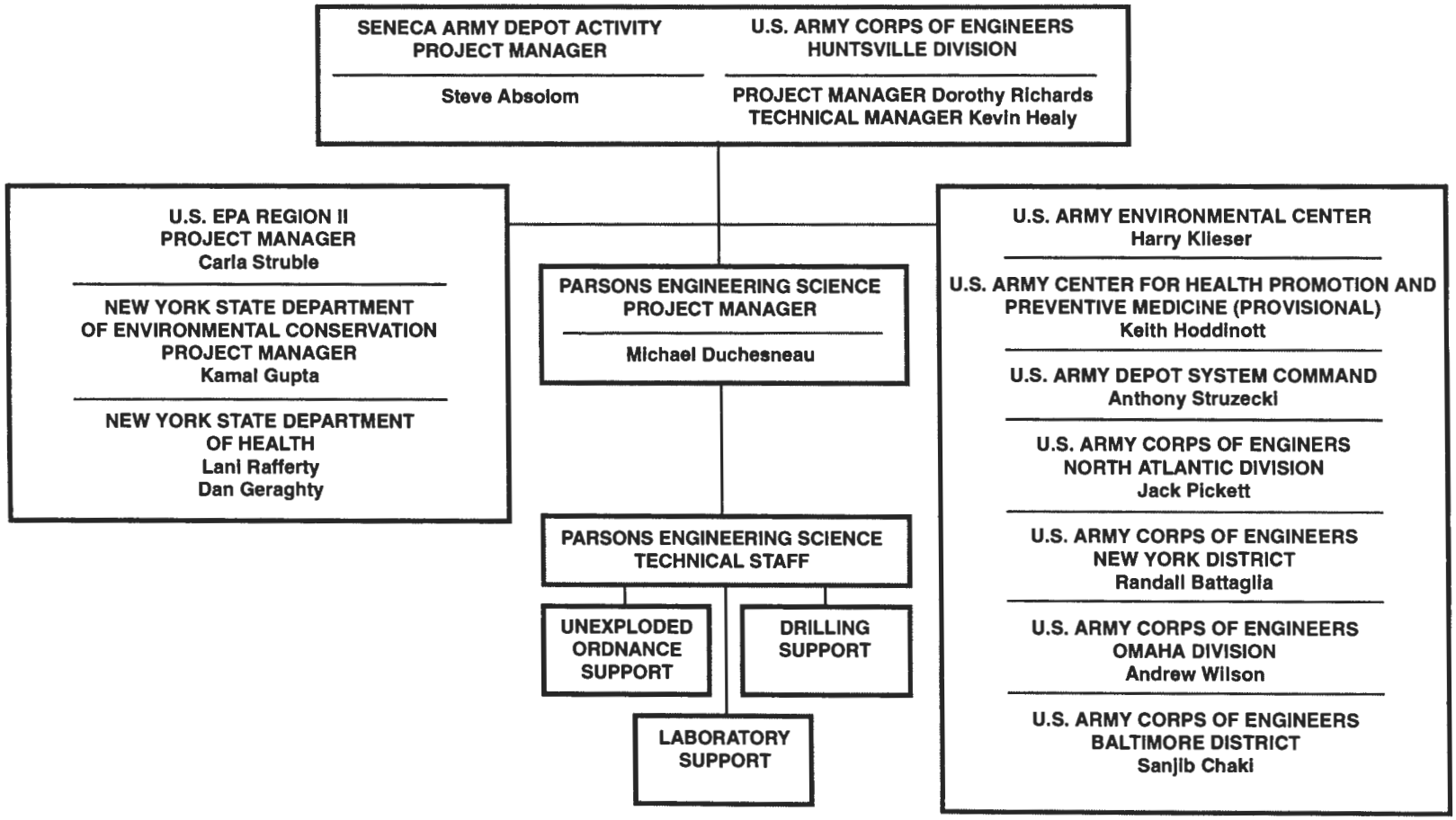
PRESENTATION
TO THE
TECHNICAL REVIEW COMMITTEE

JANUARY 24, 1996

PARSONS
PARSONS ENGINEERING SCIENCE, INC.

SENECA ARMY DEPOT ACTIVITY

PROJECT ORGANIZATION

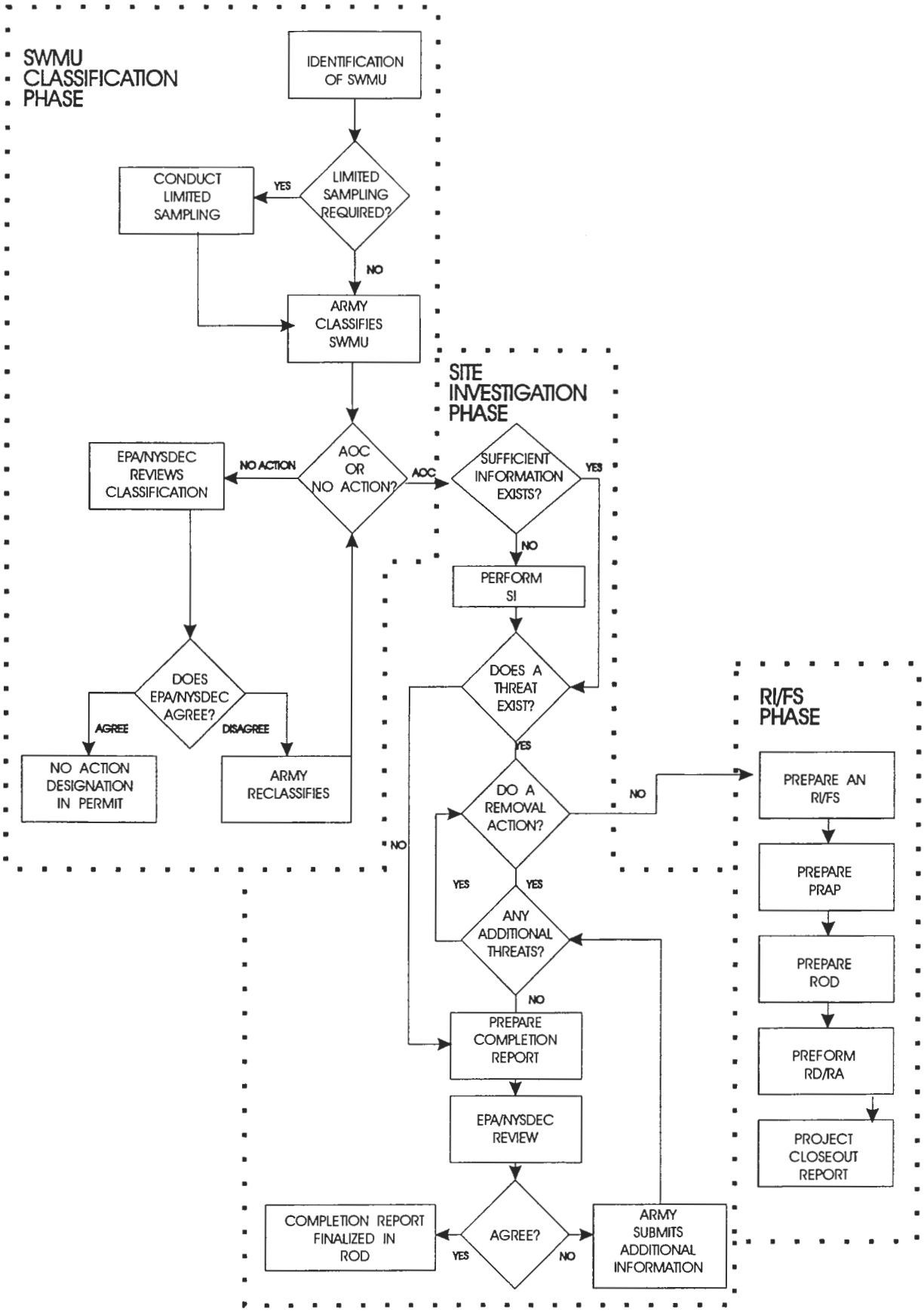


UPDATE ON AOC AND CERCLA PROCESS

- ☑ SWMU Investigation/Classification Status Update
- ☑ RI/FS's Status Update
- ☑ Decision Documents for Removal Actions

SWMU INVESTIGATION/CLASSIFICATION PROCESS STATUS REPORT

SWMU CLASSIFICATION FLOWCHART



SWMU CLASSIFICATION REPORT

- ☑ All 72 SWMUs Have Been Classified as Either No Action or Area of Concern (AOC)
- ☑ Final SWMU Classification Report Issued on September 16, 1994
- ☑ First Primary Document Finalized Under IAG

SWMU CLASSIFICATION SUMMARY

Federal Facilities Agreement (FFA) Status	Number of SWMUs or AOCs
No-Action	24
Completion Report/ROD	12
Removal Action/Completion Report/ROD	8
RI/FS/PRAP/ROD	28
TOTAL	72

ROD - Record of Decision
RI/FS - Remedial Investigation/Feasibility Study
PRAP - Proposed Remedial Action Plan
SWMU - Solid Waste Management Unit
AOC - Area of Corncern

SWMU'S REQUIRING NO FURTHER ACTION ROD'S

SWMU NUMBER	SWMU NAME
SEAD-1	Building 307 - Hazardous Waste Container Storage Facility
SEAD-2	Building 301 - PCB Transformer Storage Facility
SEAD-7	Shale Pit
SEAD-10	Present Scrap Wood Site
SEAD-18	Building 709 - Classified Document Incinerator
SEAD-19	Building 801 - Classified Document Incinerator
SEAD-20	Sewage Treatment Plant No. 4
SEAD-21	Sewage Treatment Plant No. 715
SEAD-22	Sewage Treatment Plant No. 314
SEAD-29	Building 732 - Underground Waste Oil Tank
SEAD-30	Building 118 - Underground Waste Oil Tank
SEAD-31	Building 117 - Underground Waste Oil Tank
SEAD-35	Building 718 - Waste Oil - Burning Boilers (3 units)
SEAD-36	Building 121 - Waste Oil - Burning Boilers (2 units)
SEAD-37	Building 319 - Waste Oil - Burning Boilers (2 units)
SEAD-42	Building 106 - Preventive Medicine Laboratory
SEAD-47	Buildings 321 and 806 - Radiation Calibration Source Storage
SEAD-49	Building 356 - Columbite Ore Storage
SEAD-51	Herbicide Usage - Perimeter of High Security Area
SEAD-53	Munitions Storage Igloos

SWMU'S REQUIRING NO FURTHER ACTION ROD'S

SEAD-55	Building 357 - Tannin Storage
SEAD-61	Building 718 - Underground Waste Oil Tank
SEAD-65	Acid Storage Areas
SEAD-72	Building 803 - Mixed Waste Storage Facility

AOC'S REQUIRING COMPLETION REPORT/ROD'S

AOC NUMBER	AOC NAME
SEAD-9	Old Scrap Wood Site
SEAD-27	Building 360 - Steam Cleaning Waste Tank
SEAD-32	Building 718 - Underground Waste Oil Tanks (2 units)
SEAD-33	Building 121 - Underground Waste Oil Tank
SEAD-34	Building 319 - Underground Waste Oil Tanks (2 units)
SEAD-43	Building 606 - Old Missile Propellant Test Laboratory (combined with SEAD-56)
SEAD-44	Quality Assurance Test Laboratory Location A: West of Building 616 Location B: Brady Road
SEAD-56	Building 606 - Herbicide and Pesticide Storage (Combined with SEAD-43)
SEAD-58	Debris Area near Booster Station 2131
SEAD-62	Nicotine Sulfate Disposal Area near Buildings 606 or 612
SEAD-64B & C	Garbage Disposal Areas Location B: Disposal Area south of Classification Yards Location C: Proposed Landfill Site
SEAD-69	Building 606 - Disposal Area (Combined with SEAD-43)
SEAD-70	Building 2110 - Fill Area

AOC'S REQUIRING REMOVAL ACTIONS/COMPLETION REPORTS/ROD'S

AOC NUMBER	TYPE REMOVAL	AOC NAME
SEAD-24	METALS	Abandoned Powder Burning Pit
SEAD-38	BTEX/VOCS	Building 2079 - Boiler Plant Blowdown Leach Pit
SEAD-39	BTEX/VOCS	Building 121 - Boiler Plant Blowdown Leach Pit
SEAD-40	BTEX/VOCS	Building 319 - Boiler Plant Blowdown Leach Pit
SEAD-41	BTEX/VOCS	Building 718 - Boiler Plant Blowdown Leach Pit
SEAD-50	METALS	Tank Farm
SEAD-54	METALS	Asbestos Storage (Combined with SEAD-50)
SEAD-67	METALS	Dump Site east of Sewage Treatment Plant No. 4

AOC'S REQUIRING RI/FS/ROD'S

UNIT NUMBER	RI/FS AREA	AOC NUMBER	AOC NAME
1	Abandoned Ash Landfill	SEAD-6 SEAD-3 SEAD-8 SEAD-14 SEAD-15	Ash Landfill, Incinerator Cooling Pond, Non-Combustible Fill Area, Refuse Burning Pits, and Building 2207 - Abandoned Solid Waste Incinerator
2	Open Burning Ground	SEAD-23	Open Burning Ground
3	Fire Training Areas	SEAD-25 SEAD-26	Fire Demonstration Pad and Fire Training Pit
4	High Security "Q" Area-Rad Sites	SEAD-12 SEAD-48 SEAD-63	Radioactive Waste Burial Sites Location A: Northeast of Building 813 Location B: North of Building 804 Location C: Building 804, Pitchblende Storage Igloos and Miscellaneous Components Burial Site
5	Deactivation Furnaces	SEAD-16 SEAD-17	Building S-311 - Abandoned Deactivation Furnace and Building 367 - Existing Deactivation Furnace
6	Munitions Washout Facility	SEAD-4	Munitions Washout Facility Leach Field
7	Landfills	SEAD-11 SEAD-64	Old Construction Debris Landfill and Garbage Disposal Areas: Location A: Debris Landfill south of Storage Pad, Location D: Disposal Area west of Building 2203
8	IRFNA Disposal Site	SEAD-13	IRFNA Disposal Site
9	Ammunition Breakdown Area	SEAD-52 SEAD-60	Buildings 608 and 612 - Ammunition Breakdown Area and Oil Discharge adjacent to Building 609

AOC's REQUIRING RI/FS/ROD'S

UNIT NUMBER	RI/FS AREA	AOC NUMBER	AOC NAME
10	Sludge Pile Area	SEAD-5 SEAD-59 SEAD-71	Sewage Sludge Waste Piles, Fill Area west of Building 135 and Alleged Paint Disposal Area
11	Munition Destruction Areas	SEAD-45 SEAD-46 SEAD-57	Demolition Area Small Arms Range Explosive Ordnance Disposal Area
12	Underground Storage Tank Area	SEAD-28	Building 360-Waste Oil Underground Storage Tank Area
13	Pesticide Storage Areas	SEAD-66 SEAD-68	Pesticide Storage Area Near Buildings 5 & 6 Building S-335 - Old Pest Control Shop

7 HIGH PRIORITY AOCs MILESTONES

- ☑ Draft Report (for EPA/NYSDEC Review) Issued July 8, 1994
- ☑ Draft-Final Report Issued on May 11, 1995
- ☑ No Additional NYSDEC Comments will be Provided
- ☑ EPA Comments Received on October 18, 1995
- ☑ Final Report Issued on December 11, 1995
- ☑ Army Rcommends RI/FS/PRAP/ROD at SEADs-4, 16, 17, 25, 26, and 45 and Removal Action/Completion Report/ROD at SEAD-24

3 MODERATE PRIORITY AOC MILESTONES

- ☑ Draft Submitted for EPA/NYSDEC Review on August 5, 1994
- ☑ Draft-Final Submitted on June 9, 1995
- ☑ No Additional NYSDEC Comments will be Provided
- ☑ EPA Comments Received on October 18, 1995
- ☑ Final Report Submitted on December 11, 1995
- ☑ Army Recommends:
  - RI/FS/PRAP/ROD for SEADs-11, 13, and 57

8 MODERATELY LOW PRIORITY AOC MILESTONES

- [√] Fieldwork Initiated in Early February 1994, Completed in Mid-July 1994
- [√] Draft Site Investigation Report Submitted for EPA/NYSDEC Review on April 14, 1995
- [√] NYSDEC Comments Received on October 5, 1995
- [√] EPA Comments Received on November 30, 1996
- [√] Draft-final Issued on January 11, 1996
- [√] Army Recommends:
  - RI/FS/PRAP/ROD for SEADs-5, 12, and 59
  - Completion Report/ROD for SEADs-9, (43, 56, 69), 44, and 58
  - Removal Action/Completion Report/ROD for SEAD-50

7 LOW PRIORITY AOC MILESTONES

- ☑ Fieldwork Initiated in Early February Completed in Mid-July, 1994
- ☑ Draft Site Investigation Report Submitted for EPA/NYSDEC on April 6, 1995
- ☑ Received NYSDEC Comments on Janaury 16, 1996
- ☑ EPA Comments Pending
- ☑ Army Recommends:
  - RI/FS/PRAP/ROD for SEADs-60, 63, 64, and 71
  - Completion Report/ROD for SEADs-62, and 70
  - Removal Action/Completion Report/ROD for SEAD-67

REMEDIAL INVESTIGATION/FEASIBILITY STUDY (RI/FS) STATUS REPORT

REMEDIAL INVESTIGATION (RI) AND FEASIBILITY STUDY (FS) OF THE FORMER OPEN BURNING GROUND (MILESTONES)

☑ Remedial Investigation
- Final Submitted on September 9, 1994
- Accepted as Final by Regulators

☑ Feasibility Study
- Submitted for Regulatory Review on March 10, 1994
- Received NYSDEC Comments on May 5, 1994
- Received EPA Comments on September 30, 1994
- Formal Consultation Currently On-Going

REMEDIAL INVESTIGATION (RI) AND FEASIBILITY STUDY (FS) OF THE ASH LANDFILL (MILESTONES)

☑ Remedial Investigation
- Final Submitted on October 3, 1994

☑ Feasibility Study
- Draft Submitted on September 19, 1994
- NYSDEC Comments Received on December 12, 1994
- EPA Comments Received on February 6, 1995
- Groundwater Modeling Report Submitted on January 4, 1996
- Draft-Final FS Submitted on December 15, 1995

RI/FS WORKPLAN STATUS FOR ALL 28 AOCs

☑ Generic Workplan
- Draft-Final Submitted on June 21, 1995
- No Further Comments from NYSDEC
- Accepted Final by EPA on October 6, 1995

RI/FS WORKPLAN STATUS FOR ALL 28 AOCs

☑ 6 Workplans Complete and Implementation Underway at: SEADs-3, 6, 8, 14, 15 (Ash Lanfill) and 23 (OB Grounds)

RI/FS WORKPLAN STATUS FOR ALL 28 AOCs

☑ Scoping Workplans

- 4 are Final, (SEADs 25 and 26), Approved by Regulators on Sept. 18, 1995; (SEADs-16 and 17), Issued for Regulatory Approval on October 19, 1995
- 8 are Draft, (SEADs-4, 11 12, 13, 48, 45 63 and 64)
- 8 are Pre-Draft, (SEADs-5, 46, 52, 57, 59, 60, 66 and 71), Issued for Army Review
- 2 are Under Preparation (SEADs-28 and 68)

RI/FS STATUS FOR SEAD-25

COMPLETED FIELD TASKS:

- ☑ Sample 130 Soil Gas Points and 10 Microwells
- ☑ Installed and Sampled 10 Soil Borings
- ☑ Installed and Developed 10 Overburden Monitoring Wells
- ☑ Installed and Developed 6 Bedrock Monitoring Wells
- ☑ Sampled 10 Surface Water And Sediment Locations
- ☑ Completed the Ecological Survey
- ☑ Field Surveying
- ☑ First Round of Monitoring Well Sampling
- ☑ Vertical Connection Tests
- ☑ Hydraulic Conductivity Tests

REMAINING FIELD TASKS:

- ☑ Second Round of Monitoring Well Sampling

RI/FS STATUS FOR SEAD-26

COMPLETED FIELD TASKS:

- ☑ Installed and Sampled 7 Soil Borings
- ☑ Sampled 39 Surface Soil Locations
- ☑ Installed and Developed 7 Monitoring Wells
- ☑ Sampled 10 Surface Water and Sediment Locations
- ☑ Completed the Ecological Survey
- ☑ Field Surveying
- ☑ First Round of Monitoring Well Sampling
- ☑ Vertical Connection Tests
- ☑ Hydraulic Conductivity Tests

REMAINING FIELD TASKS:

- ☑ Second Round of Monitoring Well Sampling

REMOVAL ACTION/COMPLETION REPORT/ROD STATUS REPORT

FIRST REMOVAL ACTION HIGHLIGHTS

- ☑ Removed Impacted Soil at the Ash Landfill
- ☑ Conducted Following Delineation at the RI Stage
- ☑ Objectives:
  - Remove Existing Threat
  - Eliminate Source of Groundwater Plume
  - Streamline RI/FS Process
- ☑ Treatment Goals (NYSDEC TAGM Values)
- ☑ Approximately 23,000 Cubic Yards (35,000 Tons) Successfully Treated
- ☑ Selected Remedial Alternative
  - Excavation, Low Temperature Thermal Desorption, Thermal Oxidation of Off-Gas
- ☑ Remedial Activities are Completed
- ☑ Groundwater Monitoring On-Going

DECISION DOCUMENTS FOR REMOVAL ACTION

- ☑ Decision Document for SEADs-25, 38, 39, 40 and 41
  Submitted Final on January 30, 1995

- ☑ Plans and Specifications for SEADs-25, 38, 39, 40 and 41
  Submitted Final on September 8, 1995

- ☑ Decision Document for SEADs-24, 50/54, and 67
  Submitted Final on November 8, 1995

- ☑ Plans and Specifications for SEADs-24, 50/54 and 67
  Submitted Final on November 2, 1995