

Results of the Camp Minden Dialogue Process Facilitators' Report March 13, 2015

This document represents an overview of the common themes emerging from the February/March 2015 Camp Minden Dialogue process. It does not represent a consensus of the Dialogue participants.

This report provides a brief background on the issues at Camp Minden and the Dialogue process. The facilitators' then identify two areas where we noted a significant convergence of individual ideas: key attributes to a successful cleanup and identification of technologies that show promise for addressing the problem at Camp Minden. Finally, the facilitators provided individual participants with the opportunity to include direct comments on issues important to them and input where no group convergence emerged.

Background

On October 15, 2012, an uncontrolled explosion at Camp Minden shattered windows four miles away in the City of Minden and generated a 7,000-foot mushroom cloud. The Louisiana State Police investigated the explosion and discovered millions of pounds of chemicals and explosives improperly stored and exposed to the weather at Camp Minden.

As of March 2015, there are approximately 15,687,247 pounds of M6 propellant and approximately 320,890 pounds of clean burning igniters (CBI) stored at Camp Minden.

While this material has been moved indoors, much of the material is 25 to 35 years old and in a deteriorating state. The propellant's stability is not known due to extremely poor management and recordkeeping in the past. Further, it is difficult to further assess current stability due to the risk of handling and moving the material.¹

This situation was created by the illegal actions of Explo, a company that has since filed for bankruptcy and had criminal charges filed against it. This situation places the community at risk and puts various local, state, and federal agencies in a very difficult position. In September of 2013, the Governor of the State of Louisiana issued Proclamation No. 129 BJ 2013, which declares a state of emergency at Camp Minden. This remains in effect today.

¹ Report of Explosive Safety Assistance Visit (1 to 5 December 2014) to Louisiana National Guard's Camp Minden, February 20, 2015. Department of Army.

On October 28, 2014, an Administrative Order of Consent (AOC) was signed by the following agencies:

- US Army;
- Environmental Protection Agency (EPA);
- Louisiana Military Department (also known as the Louisiana National Guard (LANG)); and
- Louisiana Department of Environmental Quality (LDEQ).

This settlement agreement provides approximately \$20 million dollars from the US government, on behalf of the Army, to the LANG to hire a contractor to destroy the M6 and CBI. There is potential for some additional funding. The agreement also outlines that EPA and LDEQ will conduct oversight to ensure the disposal meets environmental standards for air, land, and water.²

The AOC identified that the cleanup would be conducted by open burn. Many community members and groups in the area quickly organized in protest of using open burn. Their efforts resulted in public rallies, a Facebook page with over 9,000 members, and extensive press. They sent a clear message to all levels of government that it would be very difficult to proceed with an open burn in this community and any effort would be met with legal and civil disobedience obstacles, leading to further delay.

The Army team that conducted the explosive safety assistance visit in December of 2014 “cautioned against the aggressive nature of the proposed schedule for the destruction of the M6 propellant, emphasizing that open burning of propellant is a hazardous operation.”³

On January 15, 2015, the EPA granted a 90-day extension to the compliance deadlines to allow time to consider other methods of disposal. On January 26, 2015, Community organizations sent a letter to EPA requesting the establishment of a Dialogue committee.

On January 28, the EPA agreed to support forming a Dialogue committee to provide broad-based individual input into the decision to consider a technology alternative to open burn. The LANG and LDEQ participated in the process and the Army agreed to provide technical support to the effort. The Minden Dialogue Committee is made up of a group of individual volunteer citizens, community leaders, local and statewide organizations, scientists, elected officials and state representatives. A diverse local planning committee selected Dialogue participants. A list of Dialogue participants can be found in Attachment A.

Between February 12 and March 11, the Dialogue participants have spent countless hours in meetings, webinars, and conference calls in addition to researching technologies and reviewing documents. The EPA and Army have provided technical support to the group and have responded to multiple requests for information. Requests were sent out to 24

² http://www.epa.gov/region6/6xa/pdf/explo_systems_final_agreement_102914.pdf

³ stet

vendors to provide information about their technology's potential applicability to dealing with this volume of M6. Over a dozen vendors provided detailed information on 11 different technical approaches, made presentations to the Dialogue, and responded to follow-up questions. The commitment of hours and effort to this process by community leaders, government officials, vendors, and scientists has been extraordinary.

Early in the process, the Dialogue established a goal, ground rules, and criteria for evaluating the technologies. These can be found in Attachments B, C, and D. As noted in the goal statement, the group's purpose is to:

"... identify and evaluate alternative methods to open burn for the expeditious and safe (both occupational and environmental) removal of M6 Propellant and Clean Burning Igniter (CBI) from Camp Minden...."

With the intent of providing:

"...individual input to the Army, Environmental Protection Agency (EPA), Louisiana Department of Environmental Quality (LDEQ), and the Louisiana Military Department (LMD). To the extent there is a convergence of individual input, the facilitators will note this."

The Dialogue committee sought to understand the list of technologies already approved by U.S. Department of Defense (DoD) for M6 and CBI. However, the list of technologies provided by the Army for Ammunitions and Explosives appeared either to not be available or to not have the capacity to manage the volume of material found at Camp Minden. In the end, the Committee reached out to known interested vendors with a wide variety of technologies that could potentially to do the job.

The committee identified a number of technologies that are available to treat the material safely and in the relative timeframe required. The committee found that two categories of technologies appear most promising: thermal treatment and variations on hydrolysis/water-based treatments.

Due to the speed and nature of the dialogue process, participants noted that they were working with insufficient data to make definitive conclusions. They noted that no solution is perfect or immediate. What's on paper may seem like the quickest or safest method, may not be in reality. Adequate testing and ability to scale up to the required volumes will be key indicators of ultimate success.

At the end of its analysis, the committee did not converge on a single technology, but rather identified a range of potential technologies and a number of key performance attributes that are recommended for consideration during the decision process. These are presented in the following sections.

Convergence Around Attributes for a Successful Approach To Cleanup

Over the course of the process, dialogue participants identified a shared understanding of a wide range of attributes that any cleanup approach should represent. A summary of these attributes is below.

1. SELECT A PROVEN TECHNOLOGY

- Should be a mature technology that has been successfully implemented elsewhere meeting stringent performance standards and emissions controls
- Should have demonstrated effectiveness on M6 or a closely related material
- Data needs to include real performance on real projects on a daily basis, demonstrating a high level of confidence in the technology

2. MEET THE HIGHEST POSSIBLE STANDARDS FOR EMISSIONS

- Put a cap on total non-methane organic carbon emissions (this is described in detail in the description on the following this list)
- Identify all emission products and concentration levels
- On-site EPA/DEQ environmental quality officer
- Open burning is not an option

3. MONITOR EVERYTHING

- Hold, Test, and Release strongly preferred
- Continuous monitoring at all points of possible emissions
- Community monitoring
- Detailed data plan with community access to all data

4. GET IT DONE IN TIME

- Start-up time has to allow time for testing and validation
- Demonstrable capacity and throughput to ensure work is completed on time
- The preference of the community would be to complete cleanup within 24 months from March 2015
- Preference for short-term or interim actions that might handle the most hazardous materials while full-scale operation is constructed
- Identify realistic backup plans

5. CONTROL RISK OF PCDD/F, HAZARDOUS AIR POLLUTANTS, and OTHER PERSISTENT ORGANIC POLLUTANTS

- Do not burn or treat packaging in the overall process
- Explore all risks of dioxin production
- Preference for technologies which minimize the risk of de novo synthesis

6. LEAVE NOTHING BEHIND

- All installed equipment must be completely removed
- No waste or residues left on Camp Minden
- In accordance with the AOC, the property will be returned to its original condition

7. CONTROL ALL RISKS OF SPILLS OR RELEASES

- Prepare the site so that any possible spills are contained, and secondary contamination is not created

8. LIMIT THE CREATION OF WASTE

- Minimize volume of waste compared to the original volume of material (overall reduction of volume)
- Technology does not create high levels of material that has to be disposed as waste
- Seek to maximize the potential for reuse and recycling
- Come up with a plan to dispose of the packaging

9. FOCUS ON SAFETY AND HEALTH

- Worker safety and health
- Community safety and health
- Strong safety/health planning and training
- Contingency plans

10. FOCUS ON STABILITY

- Stability monitoring to ensure worker safety
- Clear materials handling methodology with experienced organization to manage on-site handling
- Look for all opportunities to evaluate stability and organize material for worst-first
- Evaluate possibility to separate 50 pound boxes which may have greater stability as per December 2014 TAV (if a potential use exists)
- Follow prioritization outlined in the December 2014 TAV as feasible

11. CONTINUOUS COMMUNICATION TO COMMUNITY

- Immediate community access to data as it is produced
- Real-time on-line as feasible
- Regular updates
- Live video feeds
- Planned, organized tours and explanations throughout the disposal process
- Citizens Advisory Group

12. CONSIDER A STRONG PRIME WITH THE POTENTIAL FOR MULTIPLE TECHNOLOGIES

- There is a possibility that more than one treatment technology could be implemented, either for reasons of speed or to treat different waste streams with different technologies
- Any contractor will have to manage a lot of moving parts to get this right
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13. EXPLORE POTENTIAL RECYCLING/REUSE APPROACH

- This option was not explored by the Committee and no Vendor came forward with this idea, but the evaluation should be open to one should a proven, reliable technology exist
- Any such proposal should demonstrate the ability to comply with all other requirements, have a bona fide final destination for the material, and be subject to continual inspections by EPA/DEQ or appropriate regulators. Jurisdiction at final destination must have environmental and health regulations and enforcement on par with those in the U.S.

Establishing Caps on Total Emissions

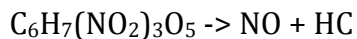
To establish the caps on the emission of effluent to the environment from proposed processes a few parameters should be considered. Any of the treatment processes will result in some kind of emission of degradation by-products, either in a gas phase, water waste stream or solid residue. While the solid residue can be treated as a separate and distinct waste stream, both water waste stream or released gasses should be subject to similar criteria for the release of decomposition by-products.

In general, the most common measure of the destruction of undesired material is called Destruction and Removal Efficiency (DRE). This term reflects on the percentage of the original material that was treated and converted to other compounds. EPA standard for the hazardous waste treatment requires 99.9999% destruction of such materials, and the overall goal of the Camp Minden cleanup process is to achieve that.

However, the concern from the community and scientists is the emission of byproducts from that process. Indeed DRE does not define by itself the emission of other than original material compounds not exceed 0.0001% of the original mass of the treated matter. That is why we propose to set emission cap on all potential by-products of the process. These include the following emissions:

- Total non-methane organic carbon (T-NMOG)
- Total cyanides (defined as hydrogen cyanide, other cyanides and isocyanides) (T-CN)
- Total NO_x
- Total suspended particulates (TSP)

The intended emissions caps should follow the 99.9999% destruction principle, with the application on the total emission mass. Considering the fact, that M6 is composed of 90% of nitrocellulose with a general formula of $C_6H_7(NO_2)_3O_5$, which translates to 10% of NO and 90% of Hydrocarbons according to a following decomposition profile:



Thus the following emission caps are desired:

t-NMOG: 0.9×10^{-6} lb/lb of treated M6

NO_x: 0.1×10^{-6} lb/lb of treated M6

TSP: 0.9×10^{-6} lb/lb of treated M6

TCN: 0 lb/lb of treated M6

This emission caps apply as a total from all effluent streams (air and water).

The above emission caps do not relieve the vendor from the attainment of the EPA emission standards for specific constituents in the effluent streams.

Convergence Around Technologies That Show Promise

The technical workgroup of the Dialogue explored a wide range of technologies. No single technology was identified that achieves everything participants identified as important. While a decent amount of information was available, this was a very quick process, and participants recognized that more information will be available during the procurement process. Participants identified a list of technologies that appear most promising at this time. These are presented alphabetically, not in priority order.

CONTAINED BURN INDOORS

Positive Factors

- High throughput
- Use of after burner

Possible Challenges

- Meeting stringent air emissions
- Increased presence of products of incomplete combustion
- General community concern about incineration as old technology, with a history of frequent bypassing of air pollution controls

HUMIC ACID CATALYZED HYDROLYSIS-NEUTRALIZATION

Positive Factors

- Proven on M6
- Rapid deployment
- High throughput
- Innovative process, vendor responsive to changes based on community concerns

Possible Challenges

- What to do with the wastewater
- Do not like fertilizer option for liquid residue (vendor can create a dry cake that would be disposed at landfill and potentially repurposed)
- How does the process manage dibutyl phthalate (DBP)?
- The only mass loss is loss of NO_x, the rest of it still has to be managed (85%), plus the mass of Humic Acid which would result in an increased mass of total material requiring disposal

MICROWAVE REACTOR

Positive Factors

- Non combustion thermal treatment
- High temperature to ensure full destruction of material and organics
- Can cycle from one reactor to another and monitor in between
- High throughput

Possible Challenges

- Long lead time, fabrication of equipment and ability to get a Department of Defense Explosive Safety Board certificate

- Use of sand, volume that requires disposal
- New technology

ROTARY KILN

Positive Factors

- Has met/exceeded high European Union Emission standards

Possible Challenges

- Limited throughput, would require multiple units
- General community concern about incineration as old technology, with a history of frequent bypassing of air pollution controls

SUPER CRITICAL WATER OXIDATION

Positive Factors

- Non-incineration, limited air emissions
- High destruction efficiency

Possible Challenges

- Wastewater needs to be handled in an environmentally appropriate manner (reverse osmosis now recommended, 95% recycled)
- How to deal with reject water from reverse osmosis
- Wastewater treatment facilities need to be able to handle the materials from the water produced
- Some of the VOCs still will be emitted to the air, need better data
- Getting enough capacity on site in time, how much time to complete the 10gpm unit that the Army owns
- Demonstrated success on M6 or propellant?

TUNNEL FURNACE

Positive Factors

- Ability to eliminate solids
- High throughput
- Two stage process with afterburner

Challenges

- General community concern about incineration as old technology, with a history of frequent bypassing of air pollution controls
- Meeting stringent air emissions, requires very good air pollution control system
- 16-19 months for whole process
- Large permanent structure would need to be dismantled
- No direct experience with M6 (but with other propellants)
- Total ash yield higher than other technologies, would require disposal in landfill

Comments From Individual Dialogue Participants

Dolores Blalock

I want to go on record with for Super Critical Water Oxidation (SCWO) as the M6 disposal method as my personal preference after examining the alternatives. The air emissions seem substantially safer than all other alternatives. The equipment exists and is available. The estimated time to complete the work is relatively fast (13 to 16 months). With three machines, SCWO should eliminate over 60,000 pounds of M6 each day. The system is portable. The General Atomics company is substantial and experienced. Their SCWO system has required Army Explosives Board approval. No technology that we examined is perfect. SCWO meets the criteria most important to me as a member of the Technical sub-committee of the Dialogue Committee.

Rick Broussard, City of Minden

Since the beginning of this process I have been very concerned about the intentions of the Army in dealing with the disposal of the M6 propellant. Their silence and utter disregard for the dialogue process has been disconcerting. I feel they would rather burn it and walk away. Better technologies are available. I believe the Dialogue Committee has succeeded in providing both options and consequences to be considered by the various government agencies. I would like to commend the efforts of the EPA, LANG and LDEQ. They participated and provided a sense of cooperation and sincerity that added to the civility of the meetings.

The outcome of this process will affect the health, safety and economic livelihood of the entire region. To be a part of this has been very sobering. The intensity of the many evaluation periods has been higher than anything I have ever witnessed and being around that level of intellect is very humbling.

I am still concerned over the many possible outcomes. I feel the people on the committee will stay connected to both the end results and each other. Friends and relationships were established that will continue well past this event.

Robert W. Flournoy, Ph.D.

I have worked in the environmental arena since 1972 and seen countless technologies used to remediate hazardous waste sites. As an Environmental Toxicologist, it is my firm recommendation that EPA take serious consideration of the "health impact" upon citizens and the environment (wildlife, soil, water and air) for any technology chosen to destroy the M6 propellants.

There are five chemicals identified in the M6 propellant. Two of the chemicals are toxic and the other three pose great risk to humans. The health effects may not be instant, but chronic, and costly in treatment both to humans and the environment. These adverse effects are widely known and documented. Releasing these chemicals into the air should never be considered as an option for M6 remediation. EPA must honor their stated Mission to select a technology that does not adversely impact the health of our citizens or the environment.

For the reasons stated above plus my technological knowledge, I recommend the Super Critical Water Oxidation (SCWO) as my first choice for disposal of M6. I feel the SCWO

method would have minimal impact on the health of our citizens and the environment and safely dispose of the M6 explosives.

Annetta Garner

Being a Camp Minden Dialogue Committee participant has been an enlightening process. It has been rewarding to work with a group of individuals striving toward a common goal, to identify and evaluate alternative methods to open burn for the expeditious and safe removal of M6 Propellant and Clean Burning Igniter (CBI) from Camp Minden. The challenge has been the number of unanswered questions regarding each technology. There is no perfect technology that meets all of the criteria that I would like to see in a safe disposal process. However, with the information I have at this time, my recommendation for safe disposal is **SUPER CRITICAL WATER OXIDATION (SCWO)**. I favor the SCWO process because it is a non-incineration process with a high destruction efficiency. Though large volumes of wastewater are produced in the process, the water can be recycled. I am not comfortable with any incineration method because I do not feel that controls are in place to ensure the safe disposal of all gases generated and incomplete combustion is also a concern. With the limited data I have at this point, SCWO appears to be the least invasive process. I look forward to the completion of a safe remedy.

Ron Hagar

I offered to help find an alternative process because I know processes. I spent almost 30 years of employment in Industrial Mechanics at Libbey Glass in Shreveport. Working there as a millwright & later as a technician, I operated the furnaces that melted the glass components, fabricated & maintained the thirteen lines of equipment shaping the glass, and annealed the glass product through Leer furnaces as it cooled.

Based upon our research of disposal options, most of the Concerned Citizens I represent do not see any thermal combustion of M6 as a safe alternative, but we question our capacity to move the U.S. Army away from their focus upon the incineration process they are performing daily throughout the nation, and which they obviously want to do here. Of the processes involving incineration, I believe that the tunnel furnace proposal is the safest & most complete combustion & abatement choice of the varied burning techniques with their dangerous emissions.

One of the chemical processes, Arctech's Actodemil, has the distinct advantage over incineration in that it produces a valuable product at the end of the process. While I have not found enough supporting chemistry to convince me that the toxic compounds in M6, especially the DBP, are sufficiently decomposed by this process to be safe for fertilizer, there may be available subcontracts with chemical corporations that could purchase the post-hydrolysis non-explosive, DOT approved slurry for refractory separation of the M6 components for resale. I understand that these components could be worth over \$50 million dollars this year. If such a bid were proposed, I would support that specific chemical process.

Finally, if SCWOs can be subcontracted to a prime contractor, I see that as the quickest & safest way to begin the remediation process while a process providing a supplement to the limited throughput capacity of currently available SCWOs is constructed. I would prefer that the construction would be another ten gallon/minute SCWO.

Overall my research shows the SCWO to have the quickest start-up time and to be the cleanest & safest technology available. Those traits place it at the top of my process preferences, but it appears that a blend of processes is needed. Thank you for allowing me to participate with such an inspiring group of fellow citizens seeking an alternative to poisoning our children, homes, food & water by incineration.

Frances Kelley

My commitment to the people of my community has been to fight for the safest disposal method possible. I oppose burning of any kind, including incineration. Communities across the country have successfully fought to close hazardous waste incinerators and prevent new ones from being built because of the serious health problems incinerators cause. Incinerators have a history of noncompliance with pollution limits and routinely using pressure release devices to bypass the air pollution control systems. I am very concerned about the dangerous products of incomplete combustion, particulate matter, NOx gases that the incinerators emit into the community. Thanks to communities who fought so hard during the ACWA process, safer technologies exist. The SCWO is our safest option, because it was specifically designed during ACWA for a zero-release paradigm, including high destruction efficiency and the capacity for hold, test, and release to ensure protection for communities from hazardous pollutants. The SCWO units are already fabricated and can begin destroying the M6 soonest. Incinerators are a technology of the past, when people believed that you could make the danger disappear by putting toxins into the air and dispersing them. SCWO is an advanced treatment technology for this century and destroys toxins more completely.

Samuel Mims

My name is Samuel Mims, retired Army Colonel, Pastor, Cattle Rancher, Resident of Dubberly, Louisiana! I became active in the concerned citizens group to stop the M6 Propellant burn at Camp Minden, Louisiana, because I just could not believe that agencies sworn to protect life, limb, and the environment would neglect their responsibilities in such horrendous fashion! This entire process has solidified my hypothesis that angry concerned citizens, united in cause and purpose can sway public opinion and motivate political will to reevaluate decisions and seek better solutions! This group was an amazing exercise demonstrating how determination, dedication, and persistence can reap huge dividends! I will ever be grateful for participation in the dialogue process and believe that its legacy will result in a safe and environmentally friendly solution to a very difficult problem! There will be no open burn and the relationships established will be remembered and cherished for a lifetime! Thanks for the opportunity to have served! Kudos to all those who likewise served! Special thanks for the tireless work of Frances Kelly for leading the concerned citizens group and to Doug and Kristi for facilitating the dialogue process!

Rebecca Sherrard

I live with these facts every day. Within the past 5 years, out of a population of approximately 600 we have buried 5 children (11 years and younger) who died of cancer. To date I can name 7 more children who are fighting cancer. They don't understand. But I do. Today we had Participants that were not there, 2 of them were with their wives at cancer appointments. Today my 28 year old niece had a complete hysterectomy because of uterine cancer. This Must Stop. The health problems we have in my community are because of past contamination from Camp Minden. Camp Minden was already a Superfund site before Explo. It is polluted and making us sick. We cannot allow for any more pollutants to be put out into the environment to harm us. I want to say, firmly, that I am against any form of burning, including incineration. I am advocating for the SCWO process. Thank you for "Hearing" me.

John Stanley, Director Webster Parish Office of Homeland Security and Emergency Preparedness.

I fully support the final product of the Dialogue Committee. I commend the efforts and contributions of all committee members and the professional direction and leadership of the facilitators. It has been an honor and privilege to work with each one of you.

Mickey Walsh

My brother in law and his family live in Doyline. As a water resource manager familiar with technologies for handling problematic water I wanted to help find a solution to the problem facing them with Camp Minden M6 and CBI. After a search on line for potential technological solutions I found one which met my requirements of being 100% environmentally safe and re-purposeful. Upon returning from visiting the company in VA, I brought my findings on Arctech back to a group meeting. The diversity of individuals within the group was greatly overshadowed by the commonality of their cause. This deeply passionate and highly motivated group required continuous refocusing by the groups leader Frances Kelley. The most interesting group dynamic was how the "ball" was never dropped. If one member was distracted to perform another task someone else would pick up and complete. There was an enormous amount of work to be done in a very short period of time. Distraction is the number one enemy of committee's formed for purposes like this. Any group which in the future would be formed to do this work would be wise to remember this. Patience and respect was a hallmark for this committee.

Comments From Agency Participants
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LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

The Louisiana Department of Environmental Quality (LDEQ) has reviewed the Camp Minden Dialogue Committee Draft Final Report and has the following comments:

1. LDEQ agrees that the Committee did not reach a consensus. LDEQ and the Committee are aware of the ground rules for this process. One of those rules recognizes that LDEQ cannot abrogate or over reach the Department's delegated authorities or responsibilities under the Louisiana laws and regulations. The report and its attachments in many cases may be asking LDEQ to impose standards in excess of what is currently required under existing law.
2. The Technical Subcommittee was tasked with evaluating potential alternative remedial technologies utilizing researched information and information submitted by contacted vendors. However, this information lacked sufficient details for LDEQ to perform a thorough assessment of the feasibility or ability to comply with applicable Louisiana environmental standards and regulations at this time.
3. The report fails to provide any cost estimates for the technologies reviewed.

LDEQ stands ready to review any proposal to determine whether a selected technology can comply with Louisiana environmental applicable standards and regulations and is consistent with the existing, or legally modified, Administrative Settlement Agreement and Order on Consent.

Next Steps

At the end of the meeting, EPA, LDEQ and LMD reported their planned next steps:

Facilitators' Report Delivered to EPA

March 13

EPA Action Memo

March 17

EPA will prepare a performance-based prescription for the technologies that are to be selected. EPA will prepare this memo within the existing AOC, and believe that the flexibility exists to move forward with an alternative remedy that will allow for technologies beyond open burn.

Competitive Quotes Received

March 18, 5 PM

This is the current due date, an extension is possible based on content of Action Memo.

Once the bids are received and opened the following activities will occur:

- Bid Opening
- Review of Quotes (1-2 weeks)
- Contractor Selection by LMD, recommendation to EPA
- EPA approval of Contractor
- Contract Award (at this point all proposals will become public record)
- Contractor produces workplans for construction, testing, health and safety, monitoring, etc.
- EPA will Review workplans, and share information and thoughts with the public, and accept or reject those workplans

Respectfully Submitted:

Kristi Parker Celico, Rocky Mountain Collaborative Solutions
Douglas Sarno, Forum Facilitation Group

March 13, 2015

ATTACHMENT A: MINDEN DIALOGUE COMMITTEE PARTICIPANT LIST

CITIZENS AND SCIENTISTS

Dolores Blalock, ArkLaTex Clean Air Network, LLC
Robert Flournoy PhD, Environmental Toxicologist
Annetta Garner, Shreveport
Ron Hagar, Saline
Sheila and Travis Herrin, Doyline
Frances Kelley, Louisiana Progress Action
Slawomir Lomnicki PhD, LSU Superfund Research Center and Department of
Environmental Services
Sam Mims, Dubberly
Marylee Orr, Louisiana Environmental Action Network
Brian Salvatore PhD, LSU Shreveport
Rebecca Shelley, Doyline
Wilma Subra, Subra Inc.
Mickey Walsh, Biologist

LOCAL OFFICIALS

Representative Gene Reynolds
Bossier Sheriff Julian Whittington, alternate: David Faulk
Bossier Parish Office of Homeland Security Ian Snellgrove, alternate: Gene Baratini
Doyline Mayor Gary Carter
Minden Mayor Tommy Davis, alternate: Rick Broussard
Shreveport Mayor Ollie Tyler designee, Steven Jackson
Webster Parish Policy Jury President Jim Bonsall
Webster Parish Sheriff Gary Sexton
Webster Parish Office of Homeland Security and Emergency Preparedness John Stanley

FEDERAL EX OFFICIO

U.S. Army – Kristina Curley
U.S. EPA – Thomas Ruiz and Sam Coleman

STATE EX OFFICIO

Louisiana Department of Environmental Quality– Karen Price and June Sutherlin
Louisiana Department of Health and Hospitals – Dr. Luann White and Dianne Dugas
Louisiana National Guard – Colonel Ronnie Stuckey
Governor's Office of Homeland Security & Emergency Preparedness – Jennifer Reynolds,
Regional Coordinator

ATTACHMENT B. GOAL AND OBJECTIVES FOR CAMP MINDEN DIALOGUE

The goal of the Camp Minden Dialogue is to identify and evaluate alternative methods to open burn for the expeditious and safe (both occupational and environmental) removal of M6 Propellant and Clean Burning Igniter (CBI) from Camp Minden, including:

- Develop criteria for evaluating the remediation methods;
- With technical expertise, evaluate the methods against the criteria;
- Based on this analysis, provide individual input to the Army, Environmental Protection Agency (EPA), Louisiana Department of Environmental Quality (LDEQ), and the Louisiana Military Department (LMD). To the extent there is a convergence of individual input, the facilitators will note this;
- Solicit input from the full diversity of the community, to ensure that all views are heard in the Dialogue process; and
- While appreciating the broader national context for decision-making, remain focused on addressing the immediate concerns at Camp Minden.

The evaluation will focus on alternative technologies to open burn, but the Technology Working Group will apply the criteria to open burn also for informational purposes only. It is widely acknowledged by the state and federal government entities in the Dialogue that open burn is strongly opposed by the local population in the area.

ATTACHMENT C. GROUND RULES FOR THE CAMP MINDEN DIALOGUE

- We will attack the issues and model civility with each other.
- Honor the agenda (time, topic, and process), unless the full Dialogue group decides we need to pursue a different direction.
- Offer possible solutions when identifying problems.
- Dialogue participants will engage in Dialogue discussions as individuals, not as formal representatives of their agencies or organizations.
- Dialogue participants are welcome to speak with the media on their own behalf, but should refrain from characterizing other individuals' views or positions. Please keep in mind that we are working to develop collaborative solutions and public statements can have a significant impact on the Dialogue's ability to move forward productively.
- Avoid surprising the other Dialogue participants with major events or activities. In general, this means informing the full Dialogue 24 hours in advance of planned activities such as major changes in policy, lawsuits, media releases, protests, etc. Notification should include enough information so that other Dialogue members can provide valuable input on proposed actions. For example, if you plan to issue a policy or write a letter to the editor, provide the actual content to the full Dialogue 24 hours in advance so that others can provide input. The initiator can choose whether to accept or ignore the input.

DECISION-MAKING PROCESS

- By law, the Army, EPA, LDEQ, and LMD cannot give away their decision-making authorities. However, these agencies have strong mandates to consider public concerns and input when making decisions.
- Each agency that is a participant in the Dialogue process agrees to listen and respond to input from the Dialogue, as follows:
 - Most agency responses will occur during the discussions of the Dialogue.
 - In some cases, it may be necessary for the agencies to take something under consideration for a few days and get back to the Dialogue with a response.
 - In unique cases, the Dialogue may ask an Agency for a written response to their input. Agencies agree to provide a response within 5 business days.
- At the conclusion of the process, each Agency will inform Dialogue participants of:
 - Dialogue input that the agency agrees with and intends to implement;
 - Dialogue input that can be incorporated with specific modifications;
 - Dialogue input that cannot be implemented and why; and
 - An overall summary of next steps and a timeline.

ATTACHMENT D. FINAL CRITERIA FOR TECHNOLOGY EVALUATION

1. Overall protection of human health and the environment:
 - Disposal method is protective and minimizes to the extent possible human, flora and fauna exposure to toxic chemicals in the M6 or CBI
 - Disposal method does not cause emissions of hazardous materials above state or federal standards. Method results in organic vapor and inorganic gas emission levels that are as low as reasonably possible
 - Disposal method is sensitive to the elevated levels of pollution that already exist in the area (such as current NO_x, and ground-level ozone levels)
 - Disposal method does not cause groundwater pollution above state or health standards
 - Disposal method does not cause soil contamination above state or health standards
 - Any residue from the M-6 is characterized and properly disposed
 - Disposal method has adequate safety controls to prevent explosions or unauthorized releases
2. Compliance with Applicable Relevant and Appropriate Requirements:
 - Disposal method meets the substance of all relevant State requirements
 - Disposal method meets the substance of all relevant Federal requirements (including overall NO_x emissions and current ground level ozone levels in the region)
 - Disposal method meets all health and safety standards
 - Disposal method can be monitored effectively, both at the site and in the surrounding community and tested to assure protective levels of contamination before any possible release (sometimes referred to as hold, test, and release)
3. Long-term effectiveness and permanence:
 - Disposal method is effective and eliminates the existing explosion threat
 - Disposal method does not cause residue contamination that remains at Camp Minden or in surrounding communities.
 - Disposal methods does not require additional treatment, maintenance or onsite storage (at Camp Minden or surrounding areas)
 - Disposal method does not put other global communities at risk
4. Reduction of toxicity, mobility, or volume through treatment
 - Disposal method does not create a more toxic by-product that does not already have an authorized disposal plan
 - Disposal method can be controlled to prevent runoff water pollution, land and airborne pollution
 - Disposal method eliminates the 16 million pounds of M6 and CBI
 - Disposal method minimizes residuals, packaging and other related materials that require treatment or specialized disposal

5. Short-term effectiveness:
 - Disposal method is efficient and can be completed in a relative short period of time to eliminate risk of explosion posed by the material
 - Disposal method can be implemented without increasing explosion risk
 - Disposal method can be designed and constructed within safe and expedient timeframes
6. Implementability:
 - Disposal method is available
 - Timeline for disposal process is available including starting date and ending date
 - Disposal method can be implemented using approved contracting mechanisms pursuant to current Emergency Declaration or other mechanisms made available for this project, including all federal and state regulatory requirements
 - Disposal method is legal
 - Disposal method does not require additional scientific research
 - Disposal method can be implemented within the federal and state environmental standards
 - Disposal method can be conducted without increased risk to workers
 - Disposal method can be completed within safe and expedient timeframes
7. Cost:
 - Disposal method does not require long-term maintenance, storage and monitoring and effectively eliminates any long-term liability to this or future generations
 - Disposal method allows the property to be returned to productive use
 - Disposal method is a cost effective use of taxpayer money.
8. State acceptance:
 - Disposal method is supported by the Louisiana National Guard
 - Disposal method is not opposed by Louisiana Department of Environmental Quality
 - Disposal method is not opposed by elected officials within the jurisdiction
 - Disposal method is not opposed by Louisiana Department of Health and Hospitals
 - Disposal method is not opposed by Louisiana State Police
 - Disposal method is not opposed by Louisiana State Homeland Security
9. Community acceptance:
 - Disposal method is accepted by local community leaders
 - Disposal method is accepted by the affected community
 - Disposal method safety controls are accepted by local response community
 - Disposal method health and safety precautions are accepted by the on-site work