27 August 2011

Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Attention: Ms. Purvi Patel, MEPA Office

Re: Former Medfield State Hospital C&D Area Draft Record of Decision (DROD) EOEA # 14448R

and Notice of Project Change IRA–RTN 2- 3020799

Dear Ms. Patel:

This letter is written to express my comments as a resident of Medfield regarding the DROD and proposed granting of a Phase 1 Waiver to allow DCAM to proceed with immediate implementation of their IRA cleanup proposal both for the temporary in-river sediment capping and for the construction of a landfill at the C&D area .

The comments below are aimed at the documentation prepared by Mr. Davis, the "Strategic" consultant employed by a major Boston law firm hired by DCAM at substantial cost to the taxpayers of the Commonwealth to "manage" the democratic process in favor of a state agency, and to provide "spin" of public input and questions put forth by an educated public that resides in the affected community. I question how someone that didn't attend the meeting could provide accurate documentation. Is MEPA to accept minutes from a third party as representative of a public meeting? I attended the subject meeting at MassDEP.

I consider government hiring expensive consultants to manage the public concern at a hazardous waste site that was created by the government, the worst form of government use of taxpayer money, setting a serious precedent. Is this a prudent form of government spending where concerns about the risk to public health and safety and the environment are concerned? Does government always know what's good for the public, and therefore free to ignore or professionally manage the public process in a democracy?

In my view, any agency of the Commonwealth that approves of this plan, bypassing the public concern, is in effect granting a permit to create an unlined hazardous waste landfill in an environmentally sensitive area which would otherwise be totally unacceptable.

The (MCP) record shows that DCAM has deliberately withheld site MCP Phase II data from public scrutiny so that it could reach (secure funding and bids), before the affected community could review facts and data in any meaningful way. In this way DCAM has effectively decoupled the Public Involvement Plan (PIP) process so that the agency could control the outcome. DCAM responded in writing to many comments by the public regarding the Interim Phase II with "that will be included in the Final Phase II". Today a final remedy is put forth according to the "minutes", yet the Final Phase II has

yet to be issued (DCAM is currently out-of-compliance with the MCP deadline created by MassDEP for MCP Phase II Comprehensive Site Assessment and Phase III Remedial Action Plan submittals).

Removal of Contaminated Fill

Rackemann in italics

"Several stakeholders requested additional information on the limited removal of contaminated fill. Questions were posed requesting full removal of all fill within the Construction and Demolition (C&D) Disposal Area, including those materials within the easement of the natural gas line. Mr. Ricciardi responded, referencing text in MassDEP's feasibility study guidance documents regarding active public utilities, that shutdown of a public utility even for a single day is considered infeasible and, therefore, contaminated material may remain in place within the easement. There was discussion between the stakeholders and MassDEP regarding the applicability of the guidance document. The result was that MassDEP indicated that the feasibility document applied to the C&D Disposal Area. The Chairman of the SHERC indicated that he disagreed with MassDEP's decision regarding the applicability."

This statement is entirely false and does not represent the discussion at the meeting. My point as SHERC Chairman was that Weston & Sampson is incorrectly applying the MassDEP guidance policy to avoid separately evaluating the feasibility of achieving or approaching background in that portion of the C & D area overlying the Zone II water supply and portions of the mapped potentially productive aquifer. Why? Because such evaluation would show that the cumulative benefit of cleanup of the C & D area outside the gas line easement would outweigh the cost, thereby requiring full excavation under the MCP.

For reference see the Phase III prepared by Weston & Sampson, page 2-11 Section 2.4.2 Full Debris Removal versus Partial Debris Removal/Feasibility of Achieving or Approaching Background. Below the text of the guidance policy Weston & Sampson concludes "Based on the above text from DEP's Guidance Document, achieving or approaching background in the C & D Area is categorically infeasible due to the presence of the gas line." Mr. Ricciardi denied that this quotation, applying to the entire C & D Area was in the report when I questioned it at the meeting.

MassDEP (Mark Baldi) confirmed with me in a telephone conversation August 25 that infeasibility per the guidance policy only applies to the gas line easement, not to the *entire* C & D landfill area. A cost/benefit analysis applies *outside* the gas line easement, but has not been performed.

Several stakeholders questioned that since the contaminated material within the natural gas line easement would remain, could additional fill be excavated to reduce the area of the C&D Disposal Area and the associated risk from contaminated material left behind. DCAM and its consultants explained that for the northern portion of the C&D Area, the distance between the River and the gas line easement, combined with the need to create a more stable slope,

constrained the amount of contaminated fill that could be safely removed without risk to the gas line.

For the remaining portion of the C&D Disposal Area, DCAM and its consultants indicated that, due to the contaminated fill remaining within the easement, the site could not be completely remediated (removed). Some contaminated material will be left behind and regardless of quantity or location; the "risk" level remains the same. Thus, the economics of removing thousands of tons of contaminated fill with negligible reduction of risk was not a fiscally responsible expenditure of taxpayers' money. Mr. Ricciardi indicated that for every 10 feet landward that the contaminated fill was removed, the cost was approximately $1,000,000. The cost of total removal, even if it were feasible, would be about $20 million.

The point I raised at the outset of the meeting was "what does any of the area outside the oil spill area in the Charles River, have to do with the Immediate Response Action" (IRA).? Mr. Ricciardi had no answer, and that's why this question isn't documented by Rackemann. There was some discussion of PAHs posing a concern in river sediment, yet the IRA Plan reveals that these areas in the river won't be subject to covering by aquablock as proposed for the oil spill area. If PAH concentrations in the river sediment are driving the IRA, then why aren't they being capped/covered?

A concern was raised that leaving contaminated materials within the Zone II of the Town's well No. 6 could jeopardize a public drinking water supply. MassDEP indicated that the constituents present within the C&D Disposal Area had little risk of being conveyed by groundwater to Well No. 6. The SHERC Chairman indicated that he was more concerned with the chlorinated solvents detected in groundwater at the Site. DCAM responded that the groundwater issues would be addressed separately as part of the Special Project Designation (SPD) Phase II and Phase III process. This meeting was strictly to address the C&D IRA according to the agenda drafted by MassDEP.

This statement is false. VOC concerns were discussed openly at the meeting, since the proposed IRA may impede the ability to clean them up. I expressed concern based upon the fact that DCAM has been made aware of VOCs in groundwater 10 years ago (during the investigation of the power plant), refused to investigate VOCs until pressed via public comment, found these contaminants above safe standards, and as of yet done nothing to control migration or mitigate the source area, when questioned at the meeting, Mr. Ricciardi stated he believed VOCs were 'dumped out the door" from the laundry building, yet this shallow source remains in the ground to this day.

The fact is that the C & D area contains hazardous concentrations of metals and SVOCs. According to the Interim Phase II, this fill is partially below the water table in Zone II. As reference Table 8 of the Interim Phase II shows the "Waste Disposal Characterization" for the C & D Area. This table includes lead (a RCRA listed waste) far above levels that would cause the C & D fill to be classified as a **characteristic hazardous waste.** Since it's a fact that this material is located below the groundwater table, if no further work is required of DCAM, I request that MEPA condition any stormwater management activity, and dewatering activity, such

that offsite disposal of collected stormwater, or groundwater generated as a result of dewatering, be transported offsite. DCAM or its agents should not be permitted to infiltrate collected stormwater or groundwater from dewatering back into the ground through the fill, because the area lies in a Zone II aquifer and potentially productive aquifer.

Riprap between ordinary low and high water lines

Several stakeholders expressed concerns that the use of riprap between ordinary low and high water was unacceptable due to aesthetics and adverse impacts to fauna that may migrate from the uplands to the River. It was suggested that a bio-stabilization approach, such as brush layering, would allow vegetation to grow below high water and would be more satisfactory to fauna movements. DCAM's consultants indicated that due to its location, approximately 200 feet of embankment could be subject to high velocity currents during storm events and that erosion in the form of scour could undermine this area. In addition, the liner that underlies the riprap is included to prevent a continuing release of contaminated fill to enter the River. Without stable, robust protection, there is a high potential for a release in the future. A suggestion was made that perhaps coconut logs could be used as the protection. DCAM's consultants indicated that the logs may not have the mass to withstand the forces in the River as well as needing to be replaced every six to ten years. It was also presented by DCAM that the total frontage in question is 200 feet out tens of miles of river frontage. Fauna will still have other avenues of accessing the banks of the Charles, which are currently so steep at the proposed location that no fauna could navigate them as they currently are. There will also be a construction fence around the Site, prohibiting upland fauna from accessing the banks for at least a year. By the time the fence is removed and construction is complete, the riprap will have been in place for a period of time and vegetation will have taken hold, and the fauna will be able to navigate the reduced-slope banks and the vegetated riprap.

MassDEP requested DCAM to reconsider the proposed riprap armor and CWRA offered contact and provide information from the environmental firm the BioEngineering Group, whom they have been in contact with. DCAM agreed to review any information provided by CRWA on this issue, but still believes that rip rap is the appropriate approach.

The fact is that the bank DCAM is attempting to "restore" is a bank made of the contaminated fill that the Commonwealth put there. It is not a natural bank, and blocks the Charles River flood storage that would otherwise be there. DCAM stated at the meeting that the rip-rip design offered comes right out of a highway (DOT) design manual. Is that what we want, the Charles River bank to look like a highway?

Regardless, what is missing here is DCAM saying that they have spent too much money already (a cost spreadsheet was passed out at the meeting), and have this out to bid, so even if some other designs were proposed, they were not going to alter their plan in any way. Be reminded that DCAM filed permits with MEPA, ACOE, and the Conservation Commission before soliciting any input from the public. Strategy. The public isn't asking for a new school, boat, or fire truck, it's asking DCAM to clean up an unlined hazardous waste landfill created by the Commonwealth.

Potential adverse impacts in addressing groundwater contamination

Several stakeholders expressed concern that construction of the geomembrane and riprap would impede groundwater remediation, if required. DCAM's consultants indicated that lateral distance of twelve feet for the riprap and approximately 40 horizontal feet of geomembrane would not impede groundwater assessments or remediation activities. (The 40 feet of geomembrane includes the 12 feet of geomembrane under the riprap.) In addition, the sources of the chlorinated solvents in the groundwater are outside of the C&D Area and those locations are critical in accessing the groundwater for remediation.

This statement is not accurate. I made the point that the FML liner intersects the water table hydraulically downgradient from the monitoring well containing VOCs at an unacceptable concentration. Therefore, how does DCAM know the effect of blocking the migration of the VOCs will be?

MassDEP indicated that additional groundwater assessment activities would be required and may include passive diffusers and/or piezometers installed within the Charles River. DCAM agreed that these types of sampling approaches may be warranted to address the chlorinated solvent issue.

Pore water sample data from the Charles River sediment has yet to be produced, not only for VOCs, but for toxins coming from the C & D Area fill. Why couldn't there be toxins in pore water from the C & D Area migrating into the Charles River? In addition, based upon levels of mercury measured in the river sediment, fish tissue should be collected since this area is commonly fished recreationally. Unfinished work, yet a permanent solution is being approved.

Capping Approach to Address Sediment Contamination in the Charles River

Several stakeholders expressed concerns that the use of a cap over the 800 square feet of contaminated sediment in the Charles River was unacceptable as the Commonwealth might place this material and not perform any additional response actions. DCAM reiterated that initial decision to use the cap was to streamline the approval process through the US Army Corps of Engineers (USACOE) as only two to three months of permitting time could elapse before the seasonal low groundwater and Charles River levels would begin to rise. Although initially this cap was considered as possibly being the final remedy for the contaminated sediment, further examination of the constraints associated with the Charles River indicated that the long-term operation and monitoring of the cap was cost prohibitive. DCAM believes that the final remedy will consist of hydraulic dredging.

A question was raised as to why this work could not be performed next year's low water conditions instead of proceeding with a cap at this time. It was pointed out that the contaminated sediment may have been present for a long period of time. MassDEP explained

that once the condition was identified, remedial actions are required to address the issue. DCAM explained that the 800 square feet that is currently identified may extend further downstream from its current location and would require additional assessments to delineate the impacted area and determine the appropriate remediation.

The CRWA asked why we were not using the hydraulic dredging now instead of wasting funds with a temporary solution. DCAM explained that the USACOE had indicated in January 2011 that dredging was viewed as being the least desirable of potential options in addressing contaminated sediment and that a comprehensive review of other options need to be included to justify the dredging. When the IRA condition was identified in May 2011, a decision was made to proceed with a minimum invasive approach (i.e. capping) such that permit review by the USACOE could be completed during low water conditions in the early fall of 2011.

DCAM applied for permits and put this project out to bid before the public could provide input to the C & D area remedial proposal. What was said at the meeting by DCAM was, we will have the permits and its out to bid, feel free to comment but we aren't going to change this plan because we spent too much in Medfield and aren't going to clean this up beyond the bid price.

Phase III Remedial Alternatives

A discussion ensued regarding if additional excavation of fill material would also be conducted as part of the Phase IV RIP. DCAM and Weston & Sampson indicated that the approach presented under the IRA would most likely be the final remedial alternative for this aspect of the project. We also discussed the remediation of chlorinated volatile organic compounds (CVOCs) in groundwater and that the selected approach would not impede future groundwater remediation. The chairman of the SHERC requested additional groundwater monitoring to show that surface water/groundwater interactions would not impact the Charles River and/or Town Well #6. Weston & Sampson discussed that an evaluation of the Site hydrogeology would be included in the Phase II CSA report and that supplemental assessment activities would be required to further evaluate the these interactions and the extent of CVOCs at the Site. Groundwater concentrations will continue to be monitored on a quarterly basis to supplement the data and understanding of groundwater conditions at the Site for use in the design of the final groundwater remedial alternative.

Following completion of Phase IV activities at the Site, an Activity and Use Limitation would be established on the deed for the property for the area requiring restrictions to prevent unacceptable exposure to remaining impacted fill.

There was no discussion that the temporary solution was going to be permanent under a Class C Response Action Outcome. There was no discussion on wells to be sampled, wells to be destroyed by the response action proposed, or what testing would follow. DCAM is not sharing the terms of the AUL, therefore it is unclear what the impact of leaving an unlined hazardous waste landfill will be on the future project/land use for the site, or the environment.

In reviewing my comments, consider that I am a volunteer member of the public, a member of the community who doesn't live near the former state hospital. I speak only for the public benefit.

In my opinion, the cumulative benefits of a more thorough cleanup outweigh the costs. This is an unlined hazardous materials landfill lying inside a contribution area to a public water supply, a potentially productive aquifer, a passive and active recreational area, a significant watershed, a flood storage area, fishing and wildlife resource, an area mapped with an endangered species, and has future land use that is not being factored into the decision making. The Commonwealth isn't being asked for a donation, it's being asked to clean up the mess it has made in our Town. If this were a private action, there would be a significant Natural Resources Damages Assessment levied to compensate for the losses. Yet, the State exempts itself from such costs.

Approving this solution is permitting an unlined hazardous materials landfill under the above described conditions. If the MCP process had been followed, rather than managed, a more favorable outcome for the public would have been reached.

John Thompson

MS Hydrogeology

Licensed Site Professional

CC: Ms. Margaret Van Deusen, Charles River Watershed Association

Medfield Town Administration (M. Sullivan, K. Trierweiler)

Medfield Town Selectmen (O. Peterson, A. Thompson, M. Fisher)

Senator James E. Timility

Representative. Denise C. Garlick

Representative Daniel B. Winslow