



**SUMMARY AND RESPONSE TO COMMENTS  
CLASS 2 PERMIT MODIFICATION REQUEST  
EBV EXPLOSIVES ENVIRONMENTAL COMPANY  
JOPLIN, MISSOURI  
EPA ID# MOD985798164**

On February 17, 2014, EBV Explosives Environmental Company (EBV), doing business as General Dynamics Ordnances and Tactical Systems - Munitions Services, submitted a Class 2 Permit Modification request to the Missouri Department of Natural Resources (DNR), requesting to modify their existing Missouri Hazardous Waste Management Facility (MHWMF) Part I Permit, originally issued October 23, 2002, and later modified. The permit modification proposed to allow EBV to add Extended Range MLRS (ER-MLRS) and Guided MLRS (GMLRS) Rocket Motors to the feed materials currently permitted to be treated in Building #3 and to increase the hazardous waste storage capacity at the facility by 25 percent or less.

EBV conducted the public participation activities for the Class 2 Permit Modification, as outlined in Code of State Regulations [10 CSR 25-7.270(2)(D)], which incorporates Code of Federal Regulations [40 CFR 270.42(b)]. The public was invited to review and offer written comments on the permit modification request during a 60-day public comment period. The public comment period began February 18, 2014, and ended April 19, 2014. EBV held a public meeting on the permit modification request on March 12, 2014. Listed below are written comments from Expert Management, Incorporated (EMI), an adjacent permitted hazardous waste facility, received during the public comment period and the DNR's responses.

**COMMENTS FROM THE PUBLIC:**

**Comment #1:**

*EMI is concerned with General Dynamics' proposed modifications for several reasons. First, as discussed in EMI's September 23, 2013, letter, EMI has serious concerns that General Dynamics' operations are not sufficiently protective of the environment, including but not limited to the groundwater beneath EMI's property. As discussed in more detail in our letters of September 23, 2013, and March 21, 2014 (copies of which are enclosed herewith), since 2009 when General Dynamics started to greatly expand its operations, EMI has detected increasing levels of perchlorate in groundwater immediately downgradient of General Dynamics' facility.*

*A map is attached hereto that depicts the locations of perchlorate and RDX detected at the EMI site from the early 1990s through 2013. RDX was not used or manufactured on the EMI property, though both perchlorate and RDX are handled in large quantities on the EBV property. This map shows that perchlorate concentrations in several key wells located immediately downgradient of the EBV property continue to increase while all other perchlorate concentrations across the EMI site have remained consistent with historic data. The location, nature and timing of these increasing levels in relation to General Dynamics' expanded operations indicate that a release or threatened release of*

*hazardous constituents, including perchlorate, into the groundwater from the General Dynamics facility likely is occurring as a result of its ongoing operations and is adversely affecting the groundwater beneath EMI's facility.*

**Response #1:**

The DNR appreciates this comment and has actively engaged EBV regarding potential releases to the environment related to EBV's operations. On November 25, 2013, the DNR staff conducted a site inspection at the EBV facility to examine EBV's operations and the area of EMI's monitoring wells located downgradient of EBV's property where the increasing perchlorate concentrations are occurring. The DNR staff also met with EBV's representative, Mr. David R. Zoghby, on April 16, 2014, to continue discussions regarding this issue. These meetings included discussion of potential sources and reasons why these perchlorate concentrations are increasing in EMI's monitoring wells. The meetings also included discussion of the steps necessary to conduct further investigation to determine the source and extent of any contamination related to potential releases at EBV and to evaluate what remedial and/or corrective action actions might be necessary to address this issue.

At the April 16, 2014, meeting with EBV, EBV's representative, Mr. David R. Zoghby, committed to hiring a contractor to investigate the perchlorate issue. He also indicated his intention to have the contractor submit a work plan to the DNR for review and approval to conduct that investigation. The DNR is continuing to work with EBV to address the increasing perchlorate concentrations in EMI's monitoring wells through the corrective action requirements and process defined in EBV's MHWMF Part I Permit.

The DNR recognizes that EBV's operations could have caused or contributed to the increasing perchlorate concentrations in EMI's wells; however, the definitive cause for the increases has not yet been established. Should the increasing concentrations prove attributable to historical releases on EBV's property or their current operations, the DNR will take appropriate steps pursuant to EBV's MHWMF Part I Permit to address the situation. The activities proposed in EBV's Class 2 Permit Modification request are not expected to significantly affect the nature and scope of EBV's upcoming investigation or result in additional permitted activities that have the potential to cause increased opportunities for releases to the environment. No additional conditions were included in EBV's MHWMF Part I Permit as a function of this Class 2 Permit Modification to address this issue, since the existing corrective action permit conditions already contain ample authority to do so.

**Comment #2:**

*In addition, General Dynamics' attempt to expand its hazardous waste storage capacity may affect the blast circles required by the Department of Defense Contractors' Safety Manual. EMI and EBV (prior to its acquisition by General Dynamics) agreed to specified blast circles, which are memorialized in an agreement between the companies. General Dynamics does not have the authority to unilaterally change the configuration of the blast circles. EMI has not agreed to restrict the use of its property except as described in its agreement with General Dynamics. General Dynamics has used requests*

*for permit modifications as an attempt to unilaterally change the blast circles in the past. For instance, General Dynamics attempted this when it requested a Class 3 modification in late 2008. At that time, EMI submitted comments (a copy of which is enclosed herewith), to inform MDNR that “EMI disputes that it is obligated in any way to comply with the blast circle boundaries as [proposed by General Dynamics], and objects to issuance of this permit modification or any other permit modification that may restrict EMI’s use of its own property beyond currently existing contractual commitments.” MDNR should be aware of this issue before allowing permit modifications that could affect its blast circle requirements or unduly restrict EMI’s ability to use areas of its property.*

**Response #2:**

Part of the Class 2 Permit Modification request was to increase the hazardous waste storage capacity of the facility by 25 percent or less. The request proposed to allow the storage of hazardous waste in the Magazine 2 Annex (Annex 2A). Specifically, the square footage of the storage space in Magazine 2 would increase by 1632 square feet by inclusion of the Annex 2A storage area.

Special Permit Condition 1.B.1.c of EBV’s MHWMF Part I Permit limits the storage at each of the four magazines at the facility not to exceed 100,000 pounds net explosive weight. The Class 2 Permit Modification kept this same restriction for the combined areas of Magazine 2 and Annex 2A. Since there is no change in net explosive weight to be stored in the combined areas, no significant change in the configuration of the corresponding blast circle is anticipated.

Based on the blast circle information in the DNR’s possession, if the boundary of the blast circle associated with Magazine 2/Annex 2A were to expand slightly as a result of this permit modification, then this blast circle would still remain within the boundaries of other previously-established blast circles that cross the EBV/EMI property boundary. As such, any slightly expanded blast circle as a result of this permit modification does not appear to represent a further restriction on EMI’s use of areas of its property.

**Comment #3:**

*Lastly, EMI is specifically concerned about General Dynamics’ request to increase its hazardous waste storage to Magazine 2, Annex 2A, which does not have secondary containment or sealed floors. General Dynamics states that because “there is no secondary containment or sealed floors,” it “proposes to limit the storage in Annex 2A to ammunition and components w(h)ere the explosive materials are contained in the device” and that there will be “no storage of containers of liquids, solids, sludge, powders, trash or debris.” However, just because the hazardous waste is contained “in the device” does not mean that releases cannot occur. EMI is concerned with General Dynamics’ request to store any hazardous waste or hazardous materials in an area where there is neither secondary containment nor sealed floors, and, as such, requests General Dynamics’ request be denied.*

**Response #3:**

The Class 2 Permit Modification request proposed to limit the storage in Annex 2A to ammunition and components where the explosive materials remain within the device while in storage. As indicated in the modification request, there will be no storage of containers of liquids, solids, sludge, powders, trash, or debris in Annex 2A. The rocket motors to be stored in Annex 2A will be wood crated and the rocket motors contained in the crates are themselves closed containers made of steel or aluminum.

Annex 2A meets the containment and container storage requirements of 10 CSR 25-7.264(1), which incorporates 40 CFR 264.17, 264.175 and 264.176, and 10 CSR 25-7.264(2). These regulations do not require secondary containment or sealed floors in areas that store containers holding only wastes that do not contain free liquids. In addition, routine inspection of this storage area is required by 10 CSR 25-7.264(1), which incorporates 40 CFR 264.174. In the unlikely event that containers appear to be leaking or a release occurs in this area, action(s) to address the situation is required by 10 CSR 25-7.264(1), which incorporates 40 CFR 264.15(c) and 40 CFR 264.171, as appropriate.