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DWQ-2014-010405

Jeff O.

Mr. Walter L. Baker, PE
Utah Division of Water Quality
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uwqcomments@utah.gov

Re: Comments from ATK Launch Systems, Inc. on Utah Division of Water Quality's (DWQ) Proposed Rulemaking – Technology-Based Limits for Controlling Nutrient Pollution (Utah Admin. R717-1-3, DAR File No. 38530)

Dear Mr. Baker:

ATK Launch Systems, Inc.'s (ATK) operations include permitted discharges to waters of the State. The above-referenced proposed rule will change DWQ's approach for addressing and controlling nutrient pollution (including the potential applicability of technology-based limits); it has potential implications for all dischargers, including industrial dischargers. Correspondingly, ATK appreciates the opportunity to provide the following comments on the proposed rule. As described below, ATK requests additional clarity in the rule to recognize the state of the science and ensure that ATK's ability to effectively manage its discharges is not compromised.

- The rulemaking's technology-based limits should not apply to direct industrial discharges. The focus of DWQ's rulemaking is on the efficacy and costs of nutrient-reduction technologies employed by wastewater treatment works operated by cities, towns and other service districts. In that context, DWQ identifies a variety of considerations relevant to assessing implications of the rule for affected persons, plants, and households. Those considerations have included the evaluation of the science and costs to support the development of a Publicly Owned Treatment Works (POTW)-related technology-based limit for phosphorus. For example, work supporting the proposed rulemaking has incorporated information from a statewide POTW nutrient removal cost study. In contrast, DWQ has not assessed the science or costs of nutrient reduction technologies for industry.¹ Instead, DWQ acknowledges there will be "few Utah businesses" affected by the rule and suggests those industries can be assessed on a case-by-case basis.² In particular, DWQ indicates that it understands ATK will

¹ In the Utah Nutrient Strategy (April 2014), DWQ recognizes that the science to support defensible site-specific criteria is incomplete. Strategy at 2, <http://www.nutrients.utah.gov/documents/2014/05May/TechBasedLimitsImpPlan.pdf>. Similarly, the science to support limits relevant to discharging industries is also incomplete.

² Industry representatives were not even identified to participate on DWQ's Nutrient Core Team (which included representatives from agriculture, drinking water utilities, POTWs, environmental interests, recreation, the brine shrimp industry, storm water interests, and academia). See generally Utah's Approach for Developing Nutrient Standards (April 2013) at <http://www.nutrients.utah.gov/coreteam/>. See also DWQ Description of Ecological study

be seeking an exemption to the rulemaking given its need to add phosphorus to the wastewater treatment system applicable to treatment of perchlorate. *See* Proposed Rulemaking (Comments by the Department Head on the fiscal impact the rule may have on businesses). ATK supports the exemption process but maintains that those exceptions are not broad enough since they presume applicability of the POTW-focused technology-based limits. Since the technology-based limits for phosphorus have not been developed for industry, they should not apply to direct industrial dischargers; ATK requests that the rule be clarified to reflect these facts.³

- Although ATK maintains that the technology-based limits should not apply to its discharges, it further requests clarification of the exemptions to account for phosphorus in the intake water. The exceptions to application of the technology-based limits for phosphorus indicate that no technology-based limit or loading cap will apply if the discharge does not increase the total phosphorus in the receiving water beyond 10%. *See* Proposed Utah Admin. R317-1-3.3C.2. Given the adaptive approach proposed by DWQ (and the potential for iterative reevaluation of issues), ATK suggests that the exception should be clarified; it should indicate that no technology-based limit or loading cap would apply if the discharge does not result in increased loading of phosphorus to the receiving water as compared with loading that could occur based on the quality of the plant's intake water (presuming that intake water is from the same watershed) or the quality of the receiving water upgradient from the facility. For example, if water upgradient of a facility has elevated ambient nutrient concentrations, those existing conditions should be identified and compared with downgradient nutrient concentrations and the corresponding loads to the receiving water. In ATK's situation, the existing data indicate that Blue Springs (the source of Blue Creek) has elevated phosphorus concentrations. Existing information also suggests that after Blue Creek flows through the ATK plant site, downgradient monitoring reveals no substantive change in phosphorus concentrations.

(related to the evaluation of ecological impacts of nutrient additions from POTWs) at <http://www.waterquality.utah.gov/nutrient/ecology.htm>; DWQ description of economic study (related to the evaluation of economic impacts on POTWs) in Statewide Nutrient Removal Cost Impact Study <http://www.waterquality.utah.gov/POTWnutrient/index.htm>.

³ Federal regulations illustrate the distinction between economic and other analyses applicable to technology-based limits for POTWs as compared with industrial wastewater treatment plants. POTWs are required to meet secondary treatment technology or best practicable waste treatment technology. 40 CFR 125.3. Industrial dischargers should be assessed based on best available economically achievable control technology (BAT). *Id.* ATK is not aware of any economic assessment of BAT for industrial dischargers to support implementation of the technology-based requirements on industry. *See generally* 40 CFR 125.3(d) (outlining specific considerations in setting case by case limitations). While other states (e.g., Colorado) have relied on its State (rather than federal) authority to promulgate technology-based standards, the federal requirements illustrate the importance of assessing specific impacts on the range of potentially affected parties. In turn, any such assessment should also trigger an evaluation of whether/how to implement a corresponding variance policy or nutrient trading program. These issues have not yet been specifically addressed.

- ATK maintains that any assessment of its discharge conditions must recognize the documented poor natural water quality in Blue Creek. As DWQ is aware, Blue Creek (and the upgradient Blue Creek Reservoir) have poor natural water quality which has been documented as part of the effort by ATK and DWQ to develop a site-specific TDS standard. *See generally* Utah Admin. R317-2-14 (4) at <http://www.rules.utah.gov/publicat/bulletin/2014/20140601/38288.htm> (effective July 2, 2014, identifying a maximum TDS of 6,300 mg/l and an average TDS of 3,900 mg/l). In fact, DWQ and EPA have recognized site-specific conditions for some time; ATK (and its predecessor, Thiokol) have, for years, implemented the acute whole effluent toxicity (WET) testing requirements in the UPDES permit by using *daphnia magna*, i.e., a species substituted for *ceriodaphnia dubia*, to account for the unique water quality conditions of both the discharge and the receiving waters. As such, any consideration of a technology-based standard should, in fact, also specifically evaluate the nature of the discharge and the receiving waters. Until that is accomplished, the technology-based standard should not apply to ATK.
- Although ATK recognizes that nutrient reduction and management is needed in some regions of Utah, it requests clarification of the exemptions from the technology-based limits to specifically grandfather (exclude) application to existing industrial treatment plants. DWQ has recognized that ATK adds phosphorus to its wastewater treatment system to promote biological treatment of the constituent the plant was designed to treat, i.e., perchlorate. *See generally* Proposed Rule, Comments by the Department head on the fiscal impact the rule may have on businesses. ATK has spent years optimizing performance of the plant to accomplish its design goals. In turn, DWQ has not evaluated the implications of imposing a POTW-based technology standard on a plant which is effectively treating a different constituent of concern. ATK maintains that industrial wastewater treatment plants in existence as of the promulgation of any technology-based standard should be exempted from application of that standard. As DWQ is aware, any such exception would be very limited. There are (by DWQ's own assessment) few industrial wastewater treatment plants that must consider nutrient issues. Additionally, those plants aren't left unregulated; there are specific end of pipe limitations imposed on most wastewater treatment plants (e.g., WET testing and other requirements included in the UPDES permit for ATK's operations at monitored outfalls from the plant).
- Although ATK maintains that the technology-based limits should not apply to its discharges, it further requests clarification of the exemption based on economic hardship to recognize the relevance of other factors as determined on a case-by-case basis. The exceptions identify economic hardship in terms of sewer service fees. *See* Proposed Utah Admin. R317-1-3.3.C.3. Economic hardship should be evaluated in ways that make the most sense given the discharging entity. The exception for economic hardship should be broadened to authorize the owner of a discharging treatment works potentially subject to the rulemaking to have the

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opportunity to demonstrate economic hardship as determined on a case-by-case basis (as opposed to limiting it to the assessment of hardship impacts based on sewer fee increases).

- ATK recognizes the proposed rule's monitoring obligations and requests clarification of the same. The proposed rule indicates that all discharging treatment works with "reasonable potential to discharge nitrogen or phosphorus" are required to implement influent and effluent nutrient monitoring. See Proposed Rule R317-1-3.3.E. The rule also indicates that the monitoring requirements "shall be self-implementing beginning January 1, 2015." While ATK recognizes the need for reliable nutrient monitoring data, it requests clarification of the triggering obligation. DWQ (not the permittee) makes the reasonable potential evaluation as part of the UPDES permit issuance process. Accordingly, any nutrient monitoring obligations should be specifically addressed by DWQ (as that decision maker) as part of permit issuance or reissuance or, if warranted, consistent with any reopener provision in an existing UPDES permit.

In summary, ATK appreciates the substantial work by DWQ to address nutrient waste loads from POTWs. It recognizes that additional nutrient management options may be available as the science supporting the same is further developed.

Thank you for your consideration of these comments.

Sincerely,



George E. Gooch, Manager
Environmental Compliance