

## Evaluation Report for Category B, Subcategories 2.3, 3.11, and 3.12 Application

**Application Number:** 2023-0476  
**Application:** New End-use Product (Product Chemistry) – Identity of Formulants; New Product Labels – New Pests, New Site or Host  
**Product:** EarthTec QZ  
**Registration Number:** 35299  
**Active ingredient (a.i.):** Copper (present as copper sulfate pentahydrate)  
**PMRA Document Number:** 3619993

### Purpose of Application

The purpose of this application was to register EarthTec QZ, a molluscicide product for use in intakes and flowing waters as well as enclosed water bodies, based on a registered precedent product.

### Chemistry Assessment

EarthTec QZ is formulated as a solution containing copper (present as copper sulfate pentahydrate) at a concentration of 5.0%. This end-use product has a density of 1.183 kg/L and pH of 1.5-2.5. The required chemistry data for EarthTec QZ have been provided, reviewed and found to be acceptable.

### Health Assessments

EarthTec QZ is considered to be toxicologically equivalent to the precedent product; therefore, no toxicology data were required.

The use of EarthTec QZ in intakes and flowing waters and water bodies is not expected to result in potential occupational or bystander exposure beyond the registered uses of copper. Overall, occupational and bystander exposure is acceptable when the end-use product is used according to label directions.

The registration of EarthTec QZ is within the currently registered use pattern for copper. Therefore, drinking water exposure and risks from copper in drinking water from the registered uses of EarthTec QZ are acceptable when the product is used according to label directions.

## **Environmental Assessment**

The registration of EarthTec QZ is within the currently registered use pattern for copper. Therefore, the risk is acceptable when EarthTec QZ is used in accordance with the label, which includes statements to mitigate risks to the environment.

## **Value Assessment**

EarthTec QZ is a copper-containing molluscicide that can be used to control invasive zebra and quagga mussels in outdoor natural and man-made waters. The information provided demonstrated the efficacy of EarthTec QZ when it is applied at concentrations from 0.03 to 0.5 mg/L copper [Cu]. EarthTec QZ will provide commercial facilities with another product for controlling adult zebra and quagga mussels and their veligers.

## **Conclusion**

The Pest Management Regulatory Agency has completed an assessment of the information provided, and has found the information acceptable to support the registration of EarthTec QZ.

## References

<b>PMRA Document Number</b>	<b>Reference</b>
3074735	2019, Chemistry-3.1.1-4, 3.2.1, 3.3.1, 3.5.4-5-Earthtec EP-18oct2019, DACO: 3.1.1,3.1.2,3.1.3,3.1.4,3.2.1,3.3.1,3.5.4,3.5.5 CBI
3074736	2019, Formulation Process for ET-F:, DACO: 3.2.2 CBI
3074737	2019, EarthTec QZ Analytical Method-12nov2019, DACO: 3.4.1 CBI
3074738	2008, Physical and Chemical Analyses of EarthTec Product, DACO: 3.5.1, 3.5.10,3.5.11,3.5.12,3.5.13,3.5.14,3.5.15,3.5.2,3.5.3,3.5.6,3.5.7,3.5.8,3.5.9 CBI
3074739	2011, Accelerated Condition (31 Day at 40C) Storage Stability and Corrosion Analysis of EarthTec Product, DACO: 3.5.10,3.5.14 CBI
3453206	2023, Value Summary for EarthTec QZ Molluscicide, DACO: 10.1,10.2, 10.2.1,10.2.2,10.2.3.1,10.2.3.2,10.2.3.3,10.2.3.4,10.2.4,10.3,10.3.1,10.3.2, 10.3.3,10.4, 10.5.1,10.5.2,10.5.3,10.5.4,10.5.5
3453207	2023, Value Summary for EarthTec QZ Molluscicide, DACO: 10.1,10.2, 10.2.1,10.2.2,10.2.3.1,10.2.3.2,10.2.3.3,10.2.3.4,10.2.4,10.3,10.3.1,10.3.2, 10.3.3,10.4, 10.5.1,10.5.2,10.5.3,10.5.4,10.5.5
3453208	2023, Use Description Scenario for EarthTec QZ Molluscicide, DACO: 5.2
3486419	2023, Evaluation of Low-dose Copper Molluscicide to Suppress Zebra Mussel ( <i>Dreissena polymorpha</i> ) Veligers and Settlement in a Natural Waterbody, DACO: 10.2.3.4
3486420	2023, Evaluation of Low-dose Copper Molluscicide to Suppress Zebra Mussel ( <i>Dreissena polymorpha</i> ) Veligers and Settlement in a Natural Waterbody, DACO: 10.2.3.4
3490369	2023, Cover Letter, DACO: 10.2.3.4

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