

**3-PART ARCHITECTURAL SPECIFICATION
FOR BIOREMEDIATION DECONTAMINATION USING BAC-
AZAP®**

Nisus Corporation

**SECTION 02 54 00
BIOREMEDIATION DECONTAMINATION
Nisus Corporation BAC-AZAP®**

(Specifier Note: *The purpose of this guide specification is to assist the Specifier in correctly specifying bioremediation decontamination and the application. The Specifier needs to edit these guide specifications to fit specific needs of the product. Contact a Nisus Corporation representative to assist in appropriate product selections. Throughout the guide specification, there are “Specifier Notes” to assist in the editing of the file. Brackets [] have been used to indicate when a selection is required. Bac-Azap is referenced in this specification.*

References have been made within the text of the specification to MasterFormat 2016 Section numbers and titles. The Specifier needs to coordinate these numbers and titles with sections included for the specific project.

This guide is for bioremediation decontamination using a multi-strain bacteria mix that eliminates organic matter and source odors.

BAC-AZAP® is composed of multiple strains of specifically bred bacteria that directly attack odor causing organic matter, eliminating the source of odors. BAC-AZAP® captures and destroys the odors, instead of simply covering them up. BAC-AZAP® chemical formulation instantly binds odor-causing molecules. It is unsurpassed in controlling odors caused by urine, feces, vomit, grease, fats, proteins, decomposing plant and animal matter, garbage odors, pet odors and other organic matter. It is especially effective in eliminating skunk odors and removes grease build-up in drain lines. BAC-AZAP® can be used in inedible product processing areas, non-processing areas, and/or exterior areas of official establishments operating under the Federal meat, poultry, shell egg grading and egg products inspection programs.

This Nisus Corporation product appears in the following CSI MasterFormat specifications section 02 54 19.19 Bioremediation Using Bacteria Injection. [This specification does not preempt label directions.](#)

SECTION 02 54 00
BIOREMEDIATION DECONTAMINATION
Nisus Corporation BAC-AZAP®

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Bioremediation treatment.

1.2 ACTION SUBMITTALS

Product Data: Bioremediation control product indicated. Include product label for bioremediation product.
(Specifier Note: DELETE article below if not specific to project. LEED projects should be addressed separately and specifically including templates of information satisfying CIR requirements and case studies of projects receiving favorable ruling.)

- A. LEED Submittals:

1. Product Data for Credit IDc1, For bioremediation decontamination:
 - a. Provide documentation describing typical methods for bioremediation decontamination involving biological product treatments and describing alternative control. Include the advantages of one treatment over the other.
 - b. Provide documentation showing significant and measureable environmental effect and actual reduction in product use.
 - c. Provide statement of project commitment to eliminate future product use.

1.3 INFORMATIONAL SUBMITTALS

(Specifier Note: VERIFY licensing requirements with local authorities. DELETE "Qualification Data" paragraph below if not project specific.)

- A. Qualification Data: For licensed applicator.

(Specifier Note: Bac-Azap® is distinguished from other bioremediation products by its "product-specific" seven-strain specifically bred bacteria and odor eliminating process.)

- B. Product Certificates.

- C. Bioremediation Decontamination Treatment Report: Include the following:

1. Date and time of application.
2. Quantity of material used.
3. Dilutions, methods, volumes used, and rates of application.
4. Areas of application.
5. Areas not accessible.

- D. Warranties: Sample of special warranties.

1.4 QUALITY ASSURANCE

- A. Applicator Qualifications: A specialist who is licensed per regulations of authorities having jurisdiction to apply bioremediation treatments and products in jurisdiction where Project is located and who employs workers trained and approved by manufacturer to apply manufacturer's products.
- B. Regulatory Requirements: Formulate and apply product per label directions
- C. Source Limitations: Obtain bioremediation decontamination products from single source from single manufacturer.
- D. Pre-installation Conference: Conduct conference at Project site.

1.5 PROJECT CONDITIONS

- A. Apply bioremediation decontamination solutions when necessary.

(Specifier Note: DELETE "Warranty" article below if not specific to project.)

1.6 WARRANTY

(Specifier Note: COORDINATE paragraph below with Division 01 sections. DELETE if not project specific.)

(Specifier Note: VERIFY warranty requirements with local authorities.)

- A. Special Warranty: NA.
 - 1. Warranty Period: NA.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Nisus Corporation; 100 Nisus Drive; Rockford, TN 37853; Phone 800.264.0870; website www.nisuscorp.com

2.2 MATERIALS

(Specifier Note: Bac-Azap® is distinguished from other bioremediation products by its "product-specific" seven-strain specifically bred bacteria and odor eliminating process.) If additional products are required for competitive procurement, contact Nisus Corporation for assistance in listing competitive products that may be available.)

- A. Bioremediation Decontamination: Provide a proper bioremediation decontamination product complying with requirements of authorities having jurisdiction, in an aqueous solution formulated to consume organic matter and remove odors. Provide quantity required for

application at the label volume and rate for the maximum bioremediation decontamination allowed for each specific use, per product's label.

1. Basis-of-Design: Subject to compliance with requirements, provide Nisus Corporation; BAC-AZAP® Bioremediation liquid [**or approved equal**].
2. Product Ingredients:
 - a. 1,2-Benzisothiazolin-3-one: 0.02-0.04%
 - b. Water: 70-99%
 - c. Other proprietary materials: 1-29.5%

2.3 MIXING

- A. May be diluted 1+1 or 2+1 dilution (water + BAC-AZAP®)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with applicator present, for compliance with requirements for interfaces with treatment are.
- B. Proceed only when unsatisfactory conditions have been corrected in a manner complying with Contract Documents.
- C. Starting work within an area will be construed as acceptance of surface conditions.

3.2 APPLICATION, GENERAL

- A. Comply with the most stringent requirements of authorities having jurisdiction and with manufacturer's label for products.

(Specifier Note: RETAIN following Article for structure that has been previously damaged by flooding or is being gutted and rebuilt.)

3.3 BATHROOMS AND FLOOR DRAINS

- A. After cleaning, spray walls and fixtures with a 1+1 or 2+1 dilution (water + BAC-AZAP) to prevent lingering odors. Pour 3 to 4 ounces of undiluted BAC-AZAP directly into floor drains and urinals at the end of the day and allow to work overnight.
- B. Start Up: Apply 4 to 6 ounces to each drain where grease and organic debris is present. Continue daily for 5 to 10 days.
- C. Maintenance: Apply 4 to 6 ounces once or twice a week.

3.4 DRAINS & FOOD PREPARATION AREAS

- A. For best results, apply product at end of day for overnight action. If drains are not used regularly, pour 2 to 3 gallons of warm water into drain opening to moisten drain surfaces before treatment. Use as a wash on all floors where organic debris may build up. In sewage overflow or pipe breakage situations, soak affected areas after removal of contaminants.

3.5 WALL VOIDS

- A. BAC-AZAP can be applied into wall voids or other inaccessible areas by spray injection or in conjunction with a foam applicator.

3.6 CRAWL SPACES & BASEMENTS

- A. Spray onto surfaces or dirt in crawl spaces that may produce or retain odors from mold, mildew, sewage, wildlife and pets. Apply at the rate of 1 quart per 100 square feet.

3.7 WALLS, FLOORS & CARPETS

- A. Begin by thoroughly cleaning areas with appropriate materials and methods. Spray BAC-AZAP on all surfaces where odors might originate including wall surfaces, floors and carpets. Apply at the rate of 1 quart per 100 square feet of surface area (approximately 3 fluid ounces per square yard). NOTE: Although BAC-AZAP is designed to be non-staining, always test surface for colorfastness in an inconspicuous area before treating entire surface. BAC-AZAP may also be fogged into confined areas, such as crawl spaces or attics using a fogging device. Dilute product 2+1 (water + BAC-AZAP) and apply as a fog at a rate of 1 gallon per 1000 cubic feet of confined space. NOTE: Do not fog BAC-AZAP into areas where people or pets are present. Wait until fog has dissipated before re-entry.

3.8 COMPOSTING

- A. Mix 6 to 8 ounces BAC-AZAP per gallon of water. Pour evenly over compost pile 2 times a week. One gallon can treat up to 50 cubic feet of compost. For best results, turn and mix compost pile while adding the BAC-AZAP solution. To speed up the composting process, add 8 ounces BAC-AZAP to 1 gallon of water-soluble fertilizer. Pour over compost pile as described above.

3.9 REFUSE CONTAINERS, GARBAGE CANS & DUMPSTERS

- A. Once unit is empty, rinse it with water and liberally spray surfaces with BAC-AZAP. If unit cannot be rinsed with water each time it is emptied, attempt to rinse with water daily or on a regular basis to remove excess soils and debris. Apply BAC-AZAP to the point of surface wetness as often as possible, to control odors and remove organic matter.

END OF SECTION