



## CM SOP #109 – Avidity Watchdog General Procedures

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### I. Purpose & Scope

To establish procedures for the operation, monitoring, and maintenance of the Avidity Watchdog EX system to ensure continuous environmental monitoring and timely response to deviations in animal housing and support areas. This SOP applies to all Comparative Medicine personnel responsible for managing or responding to temperature, humidity, airflow, and lighting data generated by the Avidity Watchdog EX system within CM-managed facilities.

### II. Roles & Responsibilities

#### Comparative Medicine Staff

- Monitor environmental conditions and alerts in the Avidity Watchdog EX system as assigned.
- Acknowledge alarms promptly and document relevant notes or corrective actions.
- Report unresolved alarms, system malfunctions, or environmental deviations to supervisory staff.
- Perform module replacements or basic troubleshooting as trained and authorized.
- Document issues and corrective actions on the appropriate logs.

#### Research Staff, Students, Visitors

Not applicable

#### CM Managers

- Ensure daily monitoring and alarm response procedures are followed.
- Verify that appropriate training is provided to personnel responsible for system oversight.
- Review alarm trends, recurring issues, and system performance.
- Coordinate corrective actions, maintenance, or vendor support as needed.

#### CM Director and AV

- Provide oversight of the environmental monitoring program to ensure continuous compliance with institutional and regulatory standards.
- Ensure adequate staffing, training, and resources are available to maintain system integrity.
- Review significant environmental deviations and determine appropriate actions to protect animal health and research integrity.
- Approve procedural changes related to environmental monitoring and alarm response.

### III. General Notes & Definitions

- The Avidity Watchdog EX system provides continuous electronic monitoring of environmental parameters in animal housing and support areas.



- Environmental alarms must be reviewed and acknowledged promptly to ensure timely correction of deviations.
- Environmental monitoring does not replace routine physical room checks; both are required.
- All system changes, alarm responses, and module replacements must be documented.
- **Avidity Watchdog EX System:** The electronic environmental monitoring system used to track temperature, humidity, airflow, and lighting in CM-managed facilities.
- **Alarm:** An alert generated when an environmental parameter exceeds established set limits or when communication is lost.
- **Active Room:** A room currently monitored by the Watchdog system with alarms enabled.
- **Neuron ID:** The unique identifier assigned to each sensor or light module within the system.

#### IV. Materials & Equipment

- Computer with access to Avidity Watchdog EX Web interface
- Authorized user login credentials
- Replacement Light Modules (LM)
- Replacement Sensor Modules (SM4)
- Ladder (as needed for ceiling-mounted modules)
- Phillips head screwdriver
- Hex key (for sensor module mounting)
- Module Neuron ID labels (provided with replacement units)
- Health and Environment Check Sheet (or approved electronic logging system)

#### V. Procedure

##### A. Routine Environmental Monitoring

1. Log into the Avidity Watchdog EX Web interface from an authorized computer at least once per workday.
2. Review the dashboard for active alerts involving temperature, humidity, airflow, lighting, or communication loss.
3. Investigate any alarm conditions promptly.
4. Document relevant observations and corrective actions.
5. Acknowledge alarms within the system once reviewed.
6. Notify supervisory staff and/or the Director/AV of alarms requiring escalation or facility intervention.

*Continuous environmental monitoring does not replace required physical room checks.*

##### B. Changing Room Properties

1. Log into Watchdog EX Web.
2. Select the Locations tab and choose the appropriate room.
3. Modify room settings as needed, including:
  - a. Active/Inactive status
  - b. Clean Time mode (temporary suspension of alarms during approved activities)
  - c. User access permissions
  - d. Lighting control



4. Ensure rooms are returned to Active status following maintenance or cleaning activities.

*Changes to environmental setpoints must be authorized by supervisory staff.*

#### **C. Alarm Review and Acknowledgment**

1. Access the Alerts section from the dashboard.
2. Select the alarm for review.
3. Enter notes documenting findings or corrective actions taken.
4. Click Acknowledge.

*Alarms remain active until acknowledged and conditions return to acceptable limits.*

#### **D. Creating or Modifying Environmental Templates**

1. Navigate to the Settings menu.
2. Select New Template or modify an existing template.
3. Assign template parameters (temperature, humidity, airflow, lighting) as appropriate.
4. Apply templates to designated rooms.
5. Confirm settings are correct after assignment.

*Only authorized personnel may create or modify templates.*

#### **E. User Account Management**

1. Navigate to Settings → Manage Users.
2. Add or modify users or groups as appropriate.
3. Assign room access and user permissions based on role.
4. Configure alarm notification settings.
5. Ensure login credentials meet system security requirements.

*Administrator-level access shall be limited to designated personnel.*

#### **F. Generating Reports**

1. Open the Reports menu.
2. Select a saved report or create a new report.
3. Choose environmental parameters, date range, and rooms.
4. Run and save the report.
5. Provide reports as requested for compliance, audits, or investigations.

#### **G. Light Module Replacement**

1. Confirm malfunction through alarm review or communication loss.
2. Obtain replacement Light Module.
3. De-energize area if required and access module location safely.
4. Remove front and internal plates.
5. Replace module and verify indicator lights activate.
6. Log into Watchdog EX and update the Neuron ID under the room's Advanced Light Module settings.
7. Confirm alarms clear and system communication resumes.
8. Contact Avidity Technical Support if issues persist.

#### **H. Sensor Module Replacement (SM4)**

1. Confirm malfunction via alarm review or discrepancy in readings.
2. Remove existing sensor using hex key and disconnect from wall plate.
3. Install new module and secure in place.
4. Log into Watchdog EX and update Neuron ID for temperature, humidity, and/or lighting as applicable.
5. Confirm environmental readings stabilize.
6. Contact Technical Support if unresolved.

#### **I. Documentation**



1. Record all system issues, module replacements, and significant alarm events on the Health and Environment Check Sheet or approved electronic system.
2. Notify supervisory personnel of unresolved environmental deviations.
3. Maintain documentation in accordance with Comparative Medicine record retention requirements.

### VI. Health & Safety

- Personnel must wear appropriate personal protective equipment (PPE) when entering animal rooms or performing module replacements, in accordance with Comparative Medicine and institutional biosafety requirements.
- Ladder use for ceiling-mounted Light Module replacement must follow institutional ladder safety guidelines.
- Electrical components must not be serviced beyond authorized module replacement. If electrical repair beyond module replacement is required, Facilities or a licensed electrician must be contacted.
- Only trained and authorized personnel may replace Sensor Modules (SM4) or Light Modules.
- Used modules shall be handled carefully and disposed of or returned according to manufacturer or institutional guidance.
- Personnel shall avoid working alone when performing ladder-based or overhead tasks.
- Any injury, exposure, or equipment-related hazard must be reported immediately in accordance with institutional safety procedures.

### VII. References & Attachments

- Avidity Watchdog EX User Manual and Technical Documentation
- Manufacturer installation and maintenance instructions for Light Modules and Sensor Modules
- *Guide for the Care and Use of Laboratory Animals*
- Institutional Environmental Health & Safety (EH&S) policies
- Comparative Medicine Environmental Monitoring and Recordkeeping policies

### VIII. Revision History

Revision Date	Revision Number	Summary of Changes
12/16/2019	2	Changed "Edstrom" to "Avidity"
03/01/2026	3	Updated format, refined content, made ADA compliant

Approved by: Nicole Compo, DVM, DVSc, DAACLAM, Attending Veterinarian