Toxic Gas Monitoring System Overview

System Background
- Installed in 2007 with building construction
- 64-channel monitoring capability
- Monitors hydrogen, chlorine, ammonia, and silane gases
- Over 30 years of operational experience at Engineering facility

Infrastructure
- Primary monitoring on A-level (cleanroom)
- Additional sensors in 1st floor interstitial space
- Double-walled compressed gas lines
- Dedicated gas storage areas with fire-rated walls
- System display panels on A-level and 3rd floor

Visual Indicators
- Blue lights mounted from ceiling indicate system status
- Blue emergency pull stations for gas shutoff
- Display panel shows green for normal operation, red for alerts
- External blue light visible from building exterior

Alert Levels
1. Exhaust System Alert
   - Blue flashing lights only
   - Automatic gas cabinet shutdown
   - No evacuation required

2. Fire Emergency
   - Standard fire alarm
   - All exits available
   - Audible announcement

3. Gas Storage Room Fire
   - Blue lights flashing
   - Audible alarm
   - Specific evacuation routes required
   - Exit toward Court of Sciences/Boelter Hall

4. Gas Leak Alert
   - Blue lights flashing
   - Audible alarm
   - Specific evacuation routes required
   - Exit toward Court of Sciences/Boelter Hall

Safety Features
- Automatic shutoff of gas delivery systems
- Multiple redundant sensors
- Regular maintenance and calibration
- Integration with building fire system
- Fire-rated storage bunker for gas cylinders

Emergency Response
- Only authorized personnel can reset system
- Evacuation route signs marked in blue (toxic gas) and red (fire)
- Primary evacuation route: east side toward Court of Sciences
- Do not use loading dock or parking structure exits during gas emergencies

Maintenance
- Monthly generator tests (4th Tuesday, 6AM)
- Weekly exhaust fan rotation (Sundays, 1AM)
- Regular sensor calibration
- Certified staff maintain system

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Key Contacts
- Nanolab Staff (6AM-8PM daily) – (310) 863-3331
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- Fire Marshal – (310) 825-5689

Note: This system meets all California state requirements and fire marshal codes for silane gas deployment in buildings.

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