| Client Confirmation | |
|--------------------------|----------------------|
| Database Name | |
| Regulation | VV |
| Rule Description | 40 CFR 60 Subpart VV |
| Rule Name | VV |
| Developed by | Z. CHEN |
| Modified by | |
| Approved by | |
| Date Approved | |
| Effective Date | |
| Replacing Existing Rules | |

| M21 Exemptions | | |
|--------------------------------|-------|--------------------|
| | Value | Comment |
| < 300 hrs | Υ | 40 CFR 60.482 1(e) |
| Inaccessible-ElevatedConnector | | |
| Inaccessible-Buried | | |
| Inaccessible-General | | |
| Inaccessible-Obstructed | | |
| Insulation | | |
| Non-VOC | | |
| Unmanned Site | | |
| UTM | | |
| Vacuum | Υ | 40 CFR 60.482 1(d) |

| AVO Exemptions | | |
|--------------------------------|-------|---------|
| | Value | Comment |
| < 300 hrs | | |
| Inaccessible-ElevatedConnector | | |
| Inaccessible-Buried | | |
| Inaccessible-General | | |
| Inaccessible-Obstructed | | |
| Insulation | | |
| Non-VOC | | |
| Unmanned Site | | |
| UTM | | |
| Vacuum | | |

| OGI Exemptions | | |
|--------------------------------|-------|---------|
| | Value | Comment |
| < 300 hrs | | |
| Inaccessible-ElevatedConnector | | |
| Inaccessible-Buried | | |
| Inaccessible-General | | |
| Inaccessible-Obstructed | | |
| Insulation | | |
| Non-VOC | | |
| Unmanned Site | | |
| UTM | | |
| Vacuum | | |

VV Sample Rule Template

| Rule Meetin | gs | | |
|-------------|-----------|-----|---|
| Date | Attendees | ID# | |
| | | | 1 |
| | | | |
| | | | |

| Notes & Comments | | |
|------------------|--|--|
| | | |
| | | |
| | | |
| | | |

| Cooling Tower Exemptions | | |
|--------------------------------|-------|---------|
| | Value | Comment |
| < 300 hrs | | |
| Inaccessible-ElevatedConnector | | |
| Inaccessible-Buried | | |
| Inaccessible-General | | |
| Inaccessible-Obstructed | | |
| Insulation | | |
| Non-VOC | | |
| Unmanned Site | | |
| UTM | | |
| Vacuum | | |

| M21 Frequency | | | | | | | | |
|---------------|-----------|------------|----------------|-----|-----|-----|-----------|----------------------------|
| Туре | SubType | SubSubType | Physical State | UTM | NDE | cvs | Frequency | Comments |
| Pump | | | LL | | | | Monthly | 40 CFR 60.482 2(a)(1) |
| Pump | DMS | | LL | | | | Exempt | 40 CFR 60.482 2(d) |
| Pump | | | LL | | Y | | Annual | 40 CFR 60.482 2(e) |
| Pump | | | LL | | | Υ | Exempt | 40 CFR 60.482 2(f) |
| Pump | | | LL | Υ | | | Exempt | 40 CFR 60.482 2(g) |
| Valve | | | GV | | | | MMQ | 40 CFR 60.482 7(a)(1) |
| Valve | | | LL | | | | MMQ | 40 CFR 60.482 7(a)(1) |
| Valve | | | GV | | Y | | Annual | 40 CFR 60.482 7(f) |
| Valve | | | LL | | Y | | Annual | 40 CFR 60.482 7(f) |
| Valve | | | GV | Υ | | | Exempt | 40 CFR 60.482 7(g) |
| Valve | | | LL | Υ | | | Exempt | 40 CFR 60.482 7(g) |
| CVS | Duct Work | | | | | | Annual | 40 CFR 60.482 10(f)(2)(ii) |
| CVS | | | | Υ | | | Exempt | 40 CFR 60.482 10(j) |
| Compressor | | | | | Υ | | Annual | 40 CFR 60.482 3(i)(2) |
| | | | | | | | | |

| AVO Frequency | | | | | | | | |
|---------------|---------------|------------|----------------|-----|-----|-----|-----------|----------------------------|
| Туре | SubType | SubSubType | Physical State | UTM | NDE | cvs | Frequency | Comments |
| Pump | | | LL | | | | Weekly | 40 CFR 60.482 2(a)(2) |
| Pump | Unmanned Site | | LL | | | | Monthly | 40 CFR 60.482 2(h) |
| CVS | Hard Piping | | | | | | Annual | 40 CFR 60.482 10(f)(1)(ii) |
| | | | | | | | | |

| OGI Frequency | | | | | | | | |
|---------------|---------|------------|----------------|-----|-----|-----|-----------|----------|
| Туре | SubType | SubSubType | Physical State | UTM | NDE | cvs | Frequency | Comments |
| | | | | | | | | |

| | Cooling Tower Frequency | | | | | | | | |
|---|-------------------------|---------|------------|----------------|-----|-----|-----|-----------|----------|
| | Туре | SubType | SubSubType | Physical State | UTM | NDE | cvs | Frequency | Comments |
| | | | | | | | | | |
| [| | | | | | | | | |

| Colling Tower Initial Monitoring SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments | M21 Initial Monitoring | Should Exempt comp | onents be scheduled fo | r initial monitoring | ? (Y/N) | | | | |
|--|----------------------------------|--------------------|------------------------|----------------------|---------|----------|-----|-----------------|-------------------------|
| LL 30 40 CFR 60.482 7(n)(2) 2/40 ke 30 40 CFR 60.482 7(n)(3) 4 | Туре | SubType | SubSubType | Physical State | UTM | NDE | cvs | Days to Respond | Comments |
| April | Pump | | | LL | | | | 30 | 40 CFR 60.482 2(a)(1) |
| LL | Valve | | | LL | | | | 30 | 40 CFR 60.482 7(a)(2)(i |
| AVO Initial Monitoring Type SubType SubSubType SubType SubType SubType SubTyp | Valve | | | GV | | | | | 40 CFR 60.482 7(a)(2)(i |
| Hard Piping Duct Work Duct | Valve | | | | | | | | |
| Duct Work 30 40 CFR 60.482 3(0)(2) AVO Initial Monitoring Should Exempt components be scheduled for initial monitoring? (Y/N) SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Cooling Tower Initial Monitoring Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments M21 Delay Monitoring Type SubType SubSubType Physical State Days Comments M21 Leak Rates Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comments Cooling Tower Leak Rates UTM NDE CVS PPM Comm | Valve | | | GV | | Y | | + | |
| AVO Initial Monitoring Should Exempt components be scheduled for initial monitoring? (Y/N) Type SubType SubSubType SubSubType Physical State UTM NDE CVS Days to Respond Comments OGI Initial Monitoring Type SubType SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Cooling Tower Initial Monitoring Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Comments Comments Comments OCI Initial Monitoring Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments | | | | | | | | | |
| AVO Initial Monitoring Should Exempt components be scheduled for initial monitoring? (Y/N) Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments DGI Initial Monitoring Should Exempt components be scheduled for initial monitoring? (Y/N) Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Cooling Tower Initial Monitoring Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Comments Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Comments Type SubType SubSubType Physical State Days Comments M21 Leak Rates Type SubType SubSubType Physical State UTM NDE CVS PPM Comments | | Duct Work | | | | | | | |
| Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Comments | Compressor | | | | | Y | | 30 | 40 CFR 60.482 3(i)(2) |
| Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Comments | AVO Initial Monitoring | Should Exempt comp | onents he scheduled fo | r initial monitoring | 7 (V/N) | | | | |
| Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments M21 Delay Monitoring Type SubType SubSubType Physical State Days Comments Type SubType SubSubType Physical State Days Comments Type SubType SubSubType Physical State Days Comments Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates | | | | | | NDE | cvs | Days to Respond | Comments |
| Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments M21 Delay Monitoring Type SubType SubSubType Physical State Days Comments Type SubType SubSubType Physical State Days Comments Type SubType SubSubType Physical State Days Comments Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates | | | | | | | | | |
| Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments M21 Delay Monitoring Type SubType SubSubType Physical State Days Comments Type SubType SubSubType Physical State Days Comments Type SubType SubSubType Physical State Days Comments Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates | | | | | | | | | |
| Cooling Tower Initial Monitoring Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments W21 Delay Monitoring Type SubType SubSubType Physical State Days Comments W21 Leak Rates Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates | OGI Initial Monitoring | Should Exempt comp | onents be scheduled fo | r initial monitoring | ? (Y/N) | | | | |
| Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments M21 Delay Monitoring Type SubType SubSubType Physical State Days Comments M21 Leak Rates Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates | Туре | SubType | SubSubType | Physical State | UTM | NDE | cvs | Days to Respond | Comments |
| Type SubType SubSubType Physical State UTM NDE CVS Days to Respond Comments M21 Delay Monitoring Type SubType SubSubType Physical State Days Comments M21 Leak Rates Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates | | | | | | | | | |
| M21 Delay Monitoring Type SubType SubSubType Physical State Days Comments W21 Leak Rates Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates | Cooling Tower Initial Monitoring | | | | | | | | |
| Type SubType SubSubType Physical State Days Comments M21 Leak Rates Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates | Туре | SubType | SubSubType | Physical State | UTM | NDE | cvs | Days to Respond | Comments |
| Type SubType SubSubType Physical State Days Comments M21 Leak Rates Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates | | | | | | | | | |
| M21 Leak Rates Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates | M21 Delay Monitoring | | | | | | | | |
| Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates | Туре | SubType | SubSubType | Physical State | Days | Comments | | | |
| Type SubType SubSubType Physical State UTM NDE CVS PPM Comments Cooling Tower Leak Rates | | | | | | | | | |
| Cooling Tower Leak Rates | M21 Leak Rates | | | | | | | | |
| | Туре | SubType | SubSubType | Physical State | UTM | NDE | cvs | PPM | Comments |
| | | | | | | | | | |
| | | | | | | | | | |
| Type SubType SubSubType Physical State UTM NDE CVS PPM Comments | Cooling Tower Leak Rates | | | | | | | | |
| | Туре | SubType | SubSubType | Physical State | UTM | NDE | cvs | PPM | Comments |
| | | | | | | | | | |

VV Sample Rule Template

| M21 PPM Response | | | | | | | | | | | |
|------------------|---------|------------|----------------|-----|-----|-----|--------|---------------------|------------------------|------------------|-----------------------|
| Туре | SubType | SubSubType | Physical State | UTM | NDE | cvs | PPM | 1 st Att | 1 st ReTest | Final Resolution | Comments |
| Pump | | | LL | | | | 10,000 | 5 | 5 | 15 | 40 CFR 60.482 2(b)(1) |
| Pump | | | LL | | Υ | | 500 | 5 | 5 | 15 | 40 CFR 60.482 2(e)(2) |
| Pump | | | HL | | | | 10,000 | 5 | 5 | 15 | 40 CFR 60.482 8(b) |
| Valve | | | LL | | | | 10,000 | 5 | 5 | 15 | 40 CFR 60.482 7(b) |
| Valve | | | GV | | | | 10,000 | 5 | 5 | 15 | 40 CFR 60.482 7(b) |
| Valve | | | LL | | Υ | | 500 | 5 | 5 | 15 | 40 CFR 60.482 7(f)(3) |
| Valve | | | GV | | Υ | | 500 | 5 | 5 | 15 | 40 CFR 60.482 7(f)(3) |
| Valve | | | HL | | | | 10,000 | 5 | 5 | 15 | 40 CFR 60.482 8(b) |
| PRV | | | LL | | | | 10,000 | 5 | 5 | 15 | 40 CFR 60.482 8(b) |
| PRV | | | HL | | | | 10,000 | 5 | 5 | 15 | 40 CFR 60.482 8(b) |
| Connector | | | | | | | 10,000 | 5 | 5 | 15 | 40 CFR 60.482 8(b) |
| CVS | | | | | | | 500 | 5 | 5 | 15 | 40 CFR 60.482 10(g) |
| Compressor | | | | | Y | | 500 | 5 | 5 | 15 | 40 CFR 60.482 3(i)(1) |
| | | | | | | | | | | | |

| OGI Response | | | | | | | | | | |
|--------------|---------|------------|----------------|-----|-----|-----|---------------------|------------------------|------------------|----------|
| Туре | SubType | SubSubType | Physical State | UTM | NDE | cvs | 1 st Att | 1 st ReTest | Final Resolution | Comments |
| | | | | | | | | | | |
| | | | | | | | | | | |

| Cooling Tower PPM Response | | | | | | | | | | | |
|----------------------------|---------|------------|----------------|-----|-----|-----|-----|---------------------|------------------------|------------------|----------|
| Туре | SubType | SubSubType | Physical State | UTM | NDE | cvs | PPM | 1 st Att | 1 st ReTest | Final Resolution | Comments |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

Rule Assignment

| Property | Value |
|----------|-------|
| | |
| | |