TECHNICAL SUPPORT DOCUMENT
For
DRAFT AIR EMISSION PERMIT NO. 14500067-007

This technical support document (TSD) is intended for all parties interested in the draft permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp. 1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the preliminary determination to issue the draft permit.

1. General Information

1.1 Applicant and Stationary Source Location:

Table 1. Applicant and Source Address

Applicant/Address	Stationary Source/Address (SIC Code: 3821/3366)
Cold Spring Granite Company 17482 Granite West Road Cold Spring, MN 56320	Cold Spring Granite Company 17482 Granite West Road Cold Spring, Stearns County
Contact: Donald Scheele, Chief Environmental Engineer Phone: 320-685-5082	

1.2 Facility Description

Cold Spring Granite Company (Permittee) operates a dimensional granite fabrication facility in Cold Spring, Minnesota. The facility previously operated at four locations in the Cold Spring area, but has consolidated operations to a single location. Granite blocks from across the country are brought to the granite fabrication plant by truck or rail. The granite blocks are cut into slabs and processed into the desired product, including building materials and monuments. The source also includes a bronze foundry and finishing operations. The facility has previously operated under a Part 70 operating permit; by removing operations, the facility later qualified for and obtained a Capped Permit under Minn. R. 7007.1140, under which it currently operates. Because of changes in the control efficiencies that the Permittee is allowed to assume under Minn. R. 7011.0070, the permittee no longer qualifies for the Capped Permit. Therefore, an individual state operating permit was applied for and is being issued for the facility.

1.3 Description of any Changes Allowed with this Permit Issuance

This permit authorizes the addition of a 2nd spraying operation at the existing foundry lacquer application operation, and the relocation of the "south tumbler" (EU029).

1.4 Permit History

Table 2. Permitting History of the Facility

Permit Number and Issuance Date	Action Authorized
14500067-001, December 4, 2002	Part 70 operating permit issued
14500067-002, August 8, 2003	Major amendment, to add foundry lacquer application booth.
14500067-003, October 5, 2004	Administrative amendment, to remove technically incorrect operating requirements from control equipment
14500067-004, July 13, 2005	Major amendment, to modify pressure drop on baghouse

Permit Number and Issuance Date	Action Authorized
14500067-006, November 19, 2007	Capped permit issued

1.5 Facility Emissions:

Table 3. Title I Emissions Increase Summary

Pollutant	Unlimited Potential Emissions from the Modification (tpy)	Limited Potential Emissions from the Modification (tpy)	NSR/112(g) Threshold for New Major Source (tpy)	NSR/ 112(g) Review Required? (Yes/No)
PM	2.13	0.32	250/100*	No
PM_{10}	2.13	0.32	250/100*	No
$PM_{2.5}$	2.13	0.32	250/100*	No
Ozone (VOC)	12.46	12.46	250/100*	No
SO_2	0	0	250/100*	No
NO_X	0	0	250/100*	No
CO	0	0	250/100*	No
Pb	0	0	250/100*	No
CO_2e	0	0	100,000	No
Fluorides	0	0	250/100*	No
H_2SO_4	0	0	250/100*	No
TRS (including compounds) including H_2S	0	0	250/100*	No
MWC organics	0	0	250/100*	No
MWC acid gases	0	0	250/100*	No
MWC metals	0	0	250/100*	No
MSW LFG	0	0	250/100*	No
Total HAP	3.92	3.92	25	No

* The foundry portion of the facility is subject to the 100 tpy threshold, as one of the 28 source categories. The rest of the facility is subject to the 250 tpy threshold.

Table 4. Total Facility Potential to Emit Summary

	PM tpy	PM_{10} tpy	$PM_{2.5}$ tpy	SO_2 tpy	NO_x tpy	CO tpy	CO_2e tpy	VOC tpy	Pb tpy	Single HAP(1) tpy	Single HAP(2) tpy	Total HAPs tpy
Total Facility Limited Potential Emissions *excluding*	80.8	74.0	73.7	2.6	73.0	52.3	53460	85.0	1.2	9.0	8.5	21.6

	PM tpy	**PM_{10}** tpy	**$PM_{2.5}$** tpy	**SO_2** tpy	**NO_x** tpy	**CO** tpy	**CO_2e** tpy	**VOC** tpy	**Pb tpy**	**Single HAP[(1)]** tpy	**Single HAP[(2)]** tpy	**Total HAPs** tpy
insignificant activities												
Potential Emissions of All Insignificant Activities	11.7	11.6	11.6	0.07	16.9	9.7	16595	4.8	0	0.0	0.6	1.1
Total Facility Limited Potential Emissions *including* insignificant activities	92.5	85.6	85.3	2.7	89.9	62.0	70055	89.8	1.2	9.0	9.1	22.7
Total Facility Actual Emissions (2010)[(4)]	14.7	6.8	NR[(3)]	0.1	4.1	3.0	NR[(3)]	8.6	0.02	NR[(3)]		

[(1)]Represents benzene, toluene, or ethylbenze

[(2)]Represents methyl isobutyl ketone or xylene

[(3)]NR = Not reported in MN emission inventory

[(4)] From MPCA's CEDR/RAPIDS3 database

Table 5. Facility Classification

Classification	Major/Affected Source	Synthetic Minor/Area	Minor/Area
PSD		NO_X, PM, PM_{10}, $PM_{2.5}$, HAP, VOC	CO, SO_2, CO_2e, Pb
Part 70 Permit Program		NO_X, PM_{10}, $PM_{2.5}$, HAP, VOC	CO, SO_2, CO_2e
Part 63 NESHAP		Total HAP, single HAP	

2. Regulatory and/or Statutory Basis

New Source Review

The facility is an existing non-major source under New Source Review, stemming from limits imposed through the previously-issued Capped Permit (14500067-006). This permit maintains the non-major status, while imposing different limits. Most of the facility is subject to the 250 tpy major source threshold; the foundry operations are one of the 28 source categories subject to the 100 tpy major source threshold. The entire facility is limited to below 100 tpy. However, when the facility looks at future changes to the facility, changes to the foundry operations will have to be compared to the 100 tpy major source threshold, while changes to the rest of the facility can be compared to the 250 tpy major source threshold.

The proposed change to the facility (installation of additional capacity to the lacquer application process) does not by itself constitute a major source under New Source Review, therefore the change is not subject to NSR.

Part 70 Permit Program

The facility is an existing non-major source under Part 70, stemming from limits imposed through the previously-issued Capped Permit (14500067-006). This permit maintains the non-major status, while imposing different limits.

New Source Performance Standards (NSPS)

NSPS Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines applies to the monuwest generator EU123. Subpart IIII in turn utilizes requirements of 40 CFR Parts 89 and 1039.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility has accepted limits on HAP emissions such that it is an area source under 40 CFR pt. 63. Thus, no major source NESHAPs apply. NESHAP Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines applies to each of the generators (EU094, EU122, EU123, EU124, EU129).

Compliance Assurance Monitoring (CAM)

CAM does not apply because the permit is not a Title V/Part 70 permit.

Environmental Review & AERA

The facility has accepted emission limitations limiting the emissions from the proposed new coating operation such that it is not subject to environmental review, i.e. an Environmental Assessment Worksheet (EAW,) and is not required to perform an Air Emissions Risk Analysis (AERA).

Minnesota State Rules

Portions of the facility are subject to the following Minnesota Standards of Performance:

- Minn. R. 7011.0610 Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment
- Minn. R. 7011.2300 Standards of Performance for Stationary Internal Combustion Engines

Table 6. Regulatory Overview of Facility

Level*	Applicable Regulations	Comments:
GP018 (includes GP022, GP023, GP024, GP025, GP026, GP027, EU029, EU096)	Title I limits to avoid NSR, limits to avoid Part 70	Limits set on PM, PM_{10}, and $PM_{2.5}$ emissions to avoid major source classification under 40 CFR § 52.21, and limits set on PM_{10} and $PM_{2.5}$ emissions to avoid major source classification under 40 CFR § 70.2
GP019 (includes GP022, GP024, GP026, GP027)	Title I limits to avoid NSR, limits to avoid Part 70	Limits set on VOC emissions to avoid major source classification under 40 CFR § 52.21 and 40 CFR § 70.2
GP020 (includes GP026, GP027)	Title I limits to avoid NSR, limits to avoid Part 70	Limits set on NO_X emissions to avoid major source classification under 40 CFR § 52.21 and 40 CFR § 70.2
GP021 (includes GP022, GP024, GP025)	Title I limits to avoid NSR, limits to avoid Part 70	Limits set on HAP (total and individual) emissions to avoid major source classification under 40 CFR § 52.21 and 40 CFR § 70.2

Level*	Applicable Regulations	Comments:
GP022, GP023, GP024, GP025, EU029, EU096, EU120, EU121	Minn. R. 7011.0715	Standards of Performance for Post- 1969 Industrial Process Equipment.
GP026	Minn. R. 7011.0610	Standards of Performance for Direct Heating Equipment
GP027	Minn. R. 7011.2300	Standards of Performance for Stationary Internal Combustion Engines
EU094, EU124	40 CFR pt. 63, subp. ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines Existing CI units at an area source of HAP. EU094 was installed in 2002, and EU124 was installed in 1986, before all applicability dates in 40 CFR pt. 60, subpart IIII.
EU122	40 CFR pt. 63, subp. ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Engine is an existing SI unit at an area source. Construction was commenced (defined at 40 CFR § 60.4230(a) as "ordered by the operator") likely after June 12, 2006, but is smaller than 500 Hp and was manufactured prior to July 1, 2008; therefore the engine is not subject to 40 CFR pt. 60, Subpart JJJJ.
EU123	40 CFR pt. 60, subp. IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Construction of the engine (as defined at 40 CFR § 60.4200(a)) was commenced after July 11, 2005 and engine was manufactured after April 1, 2006. Uses standards from 40 CFR Section 89.112: 89.112(a) for engines 12≤kW<225, Tier 3 (model year 2006 and later) (engine is approximately 223 kW) 89.113(a) for opacity standards Subpart IIII also references sections of Part 1039. These do not apply because the engine precedes model year 2011 for its size.
	40 CFR pt. 63, subp. ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines New CI unit at an area source of HAP – only requirement is to comply with NSPS Subpart IIII.
EU129	40 CFR pt. 63, subp. ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Engine is an existing SI unit at an area source. Installed in 2003, before all applicability dates in 40 CFR pt. 60, Subpart JJJJ.

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3. Technical Information

3.1 Calculations of Potential to Emit

Attachment 1 to this TSD includes a summary of the facility PTE, as well as detailed spreadsheets and supporting information prepared by the MPCA and the Permittee.

3.3 Periodic Monitoring

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements.

In evaluating the monitoring included in the permit, the MPCA considered the following:

- The likelihood of the facility violating the applicable requirements;
- Whether add-on controls are necessary to meet the emission limits;
- The variability of emissions over time;
- The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- The technical and economic feasibility of possible periodic monitoring methods; and
- The kind of monitoring found on similar units elsewhere.

Table 7 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

Table 7. Periodic Monitoring

Level*	Requirement (basis)	Additional Monitoring	Discussion
GP018 (PM sources)	PM: ≤ 71.5 tpy using 12-month rolling sum PM_{10}: ≤ 71.5 tpy using 12-month rolling sum $PM_{2.5}$: ≤ 71.5 tpy using 12-month rolling sum (Title I limit to avoid major source status)	Recordkeeping: Monthly calculation of monthly and 12-month rolling sum emissions	Permit requires that monthly emissions be calculated for individual units and operations within the facility, including combustion operations, but excluding insignificant activities. (See EU029, EU096, EU120, EU121, GP022, GP023, GP024, GP025, GP026, and GP027.) These are then summed at GP018.
GP019 (VOC sources)	VOC: ≤ 85 tpy using 12-month rolling sum (Title I limit to avoid major source status)	Recordkeeping: Monthly calculation of monthly and 12-month rolling sum emissions	Permit requires that monthly emissions be calculated for individual units and operations within the facility, including combustion operations, but excluding insignificant activities. (See GP022, GP024, GP026, and GP027.) These are then summed at GP019.

Level*	Requirement (basis)	Additional Monitoring	Discussion
GP020 (NO_X sources)	NO_X: ≤ 73 tpy using 12-month rolling sum (Title I limit to avoid major source status)	Recordkeeping: Monthly calculation of monthly and 12-month rolling sum emissions	Permit requires that monthly emissions be calculated for all combustion units within the facility, excluding insignificant activities. (See GP026 and GP027.) These are then summed at GP020.
GP021 (HAP sources)	Total HAP: ≤ 20.5 tpy using 12-month rolling sum Xylene: ≤ 8.5 tpy using 12-month rolling sum MIBK: ≤ 8.5 tpy using 12-month rolling sum Ethylbenzene: ≤ 9.0 tpy using 12-month rolling sum Toluene: ≤ 9.0 tpy using 12-month rolling sum Benzene: ≤ 9.0 tpy using 12-month rolling sum (Title I limit to avoid major source status)	Recordkeeping: Monthly calculation of monthly and 12-month rolling sum emissions	Permit requires that monthly emissions be calculated for all VOC coating operations, sand handling, and foundry operations (GP022, GP024, and GP025. Potential emissions of Individual HAP other than xylene, MIBK, ethylbenzene, toluene, and benzene (including from insignificant activities) are well below major source thresholds, so that is why only these 5 require individual calculations. All HAPS are to be included in the total HAP calculations. These are then summed at GP021.
GP022 (EU003, EU057, EU103, EU118, EU119, EU125)	PM: Variable with air flow Opacity: ≤ 20% (Minn. R. 7011.0715)	Proper O&M of controls	Potential emissions for each unit were calculated using published emission factors and equipment capacity, and allowable emissions were calculated based on equipment capacity. In all cases, non-compliance with the limit is unlikely: EU003: 24% of limit EU057: 9% of limit EU103: 3% of limit EU118: 7% of limit EU119: 10% of limit EU125:2% of limit

Level*	Requirement (basis)	Additional Monitoring	Discussion
(CE015, CE023, CE032, CE033 CE034)	Control efficiency: 85% for PM and PM_{10} Capture Efficiency: 100% for EU003, EU103, and EU125 Capture Efficiency: 80% for EU057, EU118, and EU119	See GP029	No specific control efficiency is assumed for $PM_{2.5}$. Instead, final $PM_{2.5}$ controlled emissions are conservatively assumed to be the same as PM10.
	VOC, HAP, PM, PM_{10}, $PM_{2.5}$: no specific limit for this group	Daily recordkeeping, monthly calculations	Monthly calculations of VOC, HAP, PM, PM_{10}, and $PM_{2.5}$ are used at GP018, GP019, and GP020.
GP023 (EU054, EU055)	PM: Variable with air flow Opacity: $\leq$ 20% (Minn. R. 7011.0715)	Proper O&M of controls	Potential emissions for each unit were calculated using published emission factors and equipment capacity, and allowable emissions were calculated based on equipment capacity. In all cases, non-compliance with the limit is unlikely: EU054: 11% of limit EU055: 1% of limit
(CE024, CE025)	Control efficiency: 99% for PM Control efficiency: 93% for PM_{10} Capture Efficiency: 80%	See GP028	No specific control efficiency is assumed for $PM_{2.5}$. Instead, final $PM_{2.5}$ controlled emissions are conservatively assumed to be the same as PM_{10}.
	PM, PM_{10}, $PM_{2.5}$: no specific limit for this group	Monthly recordkeeping and calculations	Monthly (not daily) recordkeeping is used because the nature of the operations is such that tracking is done by order, and an order may take several days/weeks to process. Monthly calculations of PM, PM_{10}, and $PM_{2.5}$ are used at GP018. Note the EU055, while part of the group, is not included in the calculations; its use is infrequent and emissions are low, so the maximum emissions (8760 hours) were assumed.

Level*	Requirement (basis)	Additional Monitoring	Discussion
GP024 (EU059, EU063, EU065, EU095, EU097)	PM: Variable with air flow Opacity: $\leq$ 20% (Minn. R. 7011.0715)	Proper O&M of controls	Potential emissions for each unit were calculated using published emission factors and equipment capacity, and allowable emissions were calculated based on equipment capacity. In all cases, non-compliance with the limit is unlikely: EU059: 6% of limit EU063: 1% of limit EU065: 1% of limit EU095: 1% of limit EU097: 1% of limit
(CE014)	Control efficiency: 99% for PM Control efficiency: 93% for PM_{10} Capture Efficiency: 80%	See GP028	No specific control efficiency is assumed for $PM_{2.5}$. Instead, final $PM_{2.5}$ controlled emissions are conservatively assumed to be the same as PM_{10}.
	VOC, HAP, PM, PM_{10}, $PM_{2.5}$: no specific limit for this group	Daily recordkeeping, monthly calculations	Monthly calculations of VOC, HAP, PM, PM_{10}, and $PM_{2.5}$ are used at GP018, GP019, and GP020.
GP025 (EU060, EU066, EU068, EU069, EU070)	PM: Variable with air flow Opacity: $\leq$ 20% (Minn. R. 7011.0715)	Proper O&M of controls	Potential emissions for each unit were calculated using published emission factors and equipment capacity, and allowable emissions were calculated based on equipment capacity. In all cases, non-compliance with the limit is unlikely: EU060: 1% of limit EU066: 8% of limit EU068: 1% of limit EU069: 1% of limit EU070: 1% of limit
(CE012)	Control efficiency: 99% for PM Control efficiency: 93% for PM_{10} Capture Efficiency: 80%	See GP028	No specific control efficiency is assumed for $PM_{2.5}$. Instead, final $PM_{2.5}$ controlled emissions are conservatively assumed to be the same as PM_{10}.

Level*	Requirement (basis)	Additional Monitoring	Discussion
	HAP, PM, PM_{10}, $PM_{2.5}$: no specific limit for this group	Daily recordkeeping, monthly calculations	Monthly calculations of HAP, PM, PM_{10}, and $PM_{2.5}$ are used at GP018 and GP020.
GP026 (EU096, EU110, EU111, EU112, EU113 EU114, EU115, EU116, EU117, EU126, EU127, EU128)	PM: Variable with air flow Opacity: ≤ 20%, with excursions (Minn. R. 7011.0610)	None	Potential emissions for each unit were calculated using published emission factors and equipment capacity. All units combust only natural gas or propane, so it is unlikely that they would violate the applicable PM or opacity limits. In addition, these units are vented inside a building, so testing for PM or opacity is not feasible. Exception: EU096 exhausts to the atmosphere; the calculated PM emissions are approximately 1.29% of the applicable limit.
	VOC, NO_X, PM, PM_{10}, $PM_{2.5}$: no specific limit for this group	Monthly recordkeeping and calculations	Monthly (not daily) recordkeeping is used because the daily records are not accurate; propane is delivered twice per year, and daily usage cannot be measured. The emissions from these sources are not a large part of the facility total, so it is unlikely that daily recordkeeping would add value to the monthly rolling sums. Monthly calculations of HAP, PM, PM_{10}, and $PM_{2.5}$ are used at GP018, GP019 and GP021.
GP027 (EU094, EU122, EU123, EU124, EU129	SO_2: < 0.50 lb/MMBtu Opacity: ≤ 20% (Minn. R. 7011.2300)	None	Potential emissions for each unit were calculated using published emission factors and equipment capacity, and allowable emissions were calculated based on equipment capacity. In all cases, non-compliance with the limit is unlikely: EU094: 58% of limit EU122: 0.12% of limit EU123: 58% of limit EU124: 58% of limit EU129: 0.12% of limit
	VOC, NO_X, PM, PM_{10}, $PM_{2.5}$: no specific limit for this group	Weekly recordkeeping and monthly calculations	Weekly (not daily) recordkeeping is used because engines are typically used for emergency or curtailment use, and ½ hour per week for testing; daily records would most frequently be "0". The emissions from these sources are not a large part of the facility total, so it is unlikely that daily recordkeeping would add value to the monthly rolling sums. Monthly calculations of HAP, PM,

Level*	Requirement (basis)	Additional Monitoring	Discussion
			PM_{10}, and $PM_{2.5}$ are used at GP018, GP019, and GP021.
GP028 (CE011, CE012, CE013, CE014, CE022, CE024, CE025, CE031, CE035)	Pressure drop: Varies with device Visible Emissions: No visible emissions	Daily visible emission checks, with pressure drop as a back up monitoring parameter when VE readings are not possible.	Monitoring based on the Minnesota Performance Standard for Control Equipment is adequate to have a reasonable assurance of compliance.
GP029 (CE015, CE023, CE032, CE033, CE034)	No specific operating parameters	Daily inspections with respect to alignment, saturation, tears, holes, or other conditions affection performance	Monitoring based on the Minnesota Performance Standard for Control Equipment is adequate to have a reasonable assurance of compliance.
EU029	PM: Variable with air flow Opacity: $\leq$ 20% (Minn. R. 7011.0715)	Proper O&M of controls Performance Test	Because the calculated PTE based on equipment capacity and published emission factors is higher than the calculated limit based on maximum air flow, a performance test is being requested. Calculated PM, PM_{10}, and $PM_{2.5}$ emissions are used at GP018.
CE022	Control efficiency: 99% for PM Control efficiency: 93% for PM_{10} Capture Efficiency: 100%	See GP028	No specific control efficiency is assumed for $PM_{2.5}$. Instead, final $PM_{2.5}$ controlled emissions are conservatively assumed to be the same as PM_{10}.
EU094, EU122, EU124, EU129	Operation and maintenance as described in 40 CFR 63, Subpart ZZZZ	None	O&M requirements in the standard are adequate.
EU096	PM: Variable with air flow Opacity: $\leq$ 20% (Minn. R.	Proper O&M of controls	Because the calculated PTE based on equipment capacity and published emission factors is approximately 1.3% of the standard; noncompliance is not likely.

Level*	Requirement (basis)	Additional Monitoring	Discussion
	7011.0715)		Calculated PM, PM_{10}, and $PM_{2.5}$ emissions are used at GP018.
CE031	Control efficiency: 99% for PM Control efficiency: 93% for PM_{10} Capture Efficiency: 100%	See GP028	No specific control efficiency is assumed for $PM_{2.5}$. Instead, final $PM_{2.5}$ controlled emissions are conservatively assumed to be the same as PM_{10}.
EU120	PM: Variable with air flow Opacity: $\leq$ 20% (Minn. R. 7011.0715)	Proper O&M of controls	Because the calculated PTE based on equipment capacity and published emission factors is approximately 24% of the standard; noncompliance is not likely. Calculated HAP, PM, PM_{10}, and $PM_{2.5}$ emissions are used at GP018 and GP021.
CE011	Control efficiency: 99% for PM Control efficiency: 93% for PM_{10} Capture Efficiency: 80%	See GP028	No specific control efficiency is assumed for $PM_{2.5}$. Instead, final $PM_{2.5}$ controlled emissions are conservatively assumed to be the same as PM_{10}.
EU121	PM: Variable with air flow Opacity: $\leq$ 20% (Minn. R. 7011.0715)	Proper O&M of controls	Because the calculated PTE based on equipment capacity and published emission factors is approximately 7% of the standard; noncompliance is not likely. Calculated PM, PM_{10}, and $PM_{2.5}$ emissions are used at GP018.
CE035	Control efficiency: 99% for PM Control efficiency: 93% for PM_{10} Capture Efficiency: 80%	See GP028	No specific control efficiency is assumed for $PM_{2.5}$. Instead, final $PM_{2.5}$ controlled emissions are conservatively assumed to be the same as PM_{10}.

Level*	Requirement (basis)	Additional Monitoring	Discussion
EU123	Operation and maintenance as described in 40 CFR 63, Subpart ZZZZ and 40 CFR 60, Subpart IIII	None	O&M requirements in the standard are adequate.

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3.4 Insignificant Activities

Cold Spring Granite has several operations which are classified as insignificant activities under the MPCA's permitting rules. These are listed in Appendix D to the permit.

The permit is required to include periodic monitoring for all emissions units, including insignificant activities, per EPA guidance. The insignificant activities at this Facility are only subject to general applicable requirements. Using the criteria outlined earlier in this TSD, the following table documents the justification why no additional periodic monitoring is necessary for the current insignificant activities. See Attachment 1 of this TSD for PTE information for the insignificant activities.

Table 8. Insignificant Activities

Insignificant Activity	General Applicable Emission limit	Discussion
Brazing, soldering or welding equipment	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0710/715)	For these units, based on EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Individual units with potential emissions less than 2000 lb/year of certain pollutants	PM, variable depending on airflow Opacity ≤ 20% (with exceptions) (Minn. R. 7011.0715 and Minn. R. 7011.610)	There are 157 natural gas combustion units totaling approximately 27 MMBtu/hour. PTEs of each unit were calculated and found to be below the IA thresholds.
	PM, variable depending on airflow Opacity ≤ 20% (with exceptions) (Minn. R. 7011.0710/0715)	A variety of particulate sources are included in this subpart. Potential emissions have been calculated and shown to be below the IA thresholds.
Fugitive Emissions from unpaved roads and parking lots	Requirement to take reasonable measures to prevent PM from becoming airborne	The draft/proposed permit does contain a general requirement that this standard must be met.

Insignificant Activity	General Applicable Emission limit	Discussion
	(Minn. R. 7011.0150)	
Infrequent use of spray paint equipment for routine housekeeping or plant upkeep activities not associated with primary production processes at the stationary source	PM, variable depending on airflow or process weight rate Opacity ≤ 20% (Minn. R. 7011.0715)	While spray equipment will have the potential to emit particulate matter, these particular activities are those not associated with production, so they would be infrequent and usually occur outdoors. Testing or monitoring is not feasible.
Equipment venting PM/PM_{10} inside a building, provided that emissions from the equipment are: a). filtered through an air cleaning system; and b). vented inside of the building 100% of the time	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0715)	Several individual units are listed in the permit appendix. For these units, it is highly unlikely that they could violate the applicable requirement. In addition, these units are vented inside a building, so testing for PM or opacity is not feasible.

3.5 Permit Organization

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements. One area where this permit deviates slightly from Delta guidance is in the use of appendices. While appendices are fully enforceable parts of the permit, in general, any requirement that the MPCA thinks should be electronically tracked (e.g., limits, submittals, etc.), should be in Table A or B of the permit. The main reason is that the appendices are word processing sections and are not part of the electronic tracking system. Violation of the appendices can be enforced, but the computer system will not automatically generate the necessary enforcement notices or documents. Staff must generate these

3.6 Comments Received

Public Notice Period: <start date> - <end date>
EPA 45-day Review Period: <start date> - <end date>

Comments were <not> received from the public during the public notice period. <The comments received did <not> include adverse comments on any applicable requirements of the permit. Changes to the permit were <not> made as a result of the comments. *Provide summary of changes.* >

4. Permit Fee Assessment

This permit action is the issuance of an individual State operating permit based on an application received 1/20/2012. Even though the Permittee previously held a Capped Emission permit, this action is not considered a reissuance of an individual state or Part 70 operating permit; therefore, the application fees apply under Minn. R. 7002.0019. The application fee was submitted with the application. Additional points are assessed for establishment of limits to avoid Part 70 and New Source Review. Additional points are not assessed for the incorporation of NSPS Subpart IIII, or NESHAP Subpart ZZZZ, because there is no change being made to units subject to these standards; these are new standards applicable to equipment that existed at the time the standard came into existence (per fee calculation instructions dated 3/15/2011). See Attachment 3 for details of the additional points calculation.

5. Conclusion

Based on the information provided by Cold Spring Granite Company, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 14500067-007 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Toni Volkmeier (permit writer/engineer)
Dave Crowell (enforcement)
Marc Severin (stack testing)
Marshall Cole (peer reviewer)
Laurie O'Brien (administrative support)

AQ File No. 2181A; DQ 3808

Attachments:
1. PTE Summary and Emissions Calculation Spreadsheets
2. Facility Description and CD-01 Forms
3. Additional Points Calculation

Attachment 1

Calculations and PTE Summary

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Acetaldehyde							
	EU 063	PER 007		1.590E-02	6.970E-02	6.970E-02	
	EU 094	PER 006		1.150E-03			
	EU 094	PER 007		1.240E-03	5.430E-03	5.430E-03	
	EU 097	PER 007		1.590E-02	6.970E-02	6.970E-02	
	EU 122	PER 006		1.590E-02			
	EU 122	PER 007		5.720E-03	2.510E-02	2.510E-02	
	EU 123	PER 006		2.300E-03			
	EU 123	PER 007		2.410E-03	1.050E-02	1.050E-02	
	EU 124	PER 007		1.850E-03	8.110E-03	8.110E-03	
	EU 129	PER 007		7.790E-05	3.410E-04	3.410E-04	
	FC 000	PER 006					4.890E-02
	FC 000	PER 007					0.000E+00
	GP 001	PER 006		0.000E+00	0.000E+00		
	GP 002	PER 006				0.000E+00	
Totals					1.889E-01	1.889E-01	0.000E+00
Acrolein							
	EU 063	PER 007		2.300E-03	9.900E-03	9.900E-03	
	EU 094	PER 006		1.390E-04			
	EU 094	PER 007		1.500E-04	6.550E-04	6.550E-04	
	EU 097	PER 007		2.300E-03	9.900E-03	9.900E-03	
	EU 122	PER 006		1.600E-02			
	EU 122	PER 007		5.400E-03	2.360E-02	2.360E-02	
	EU 123	PER 006		2.780E-04			
	EU 123	PER 007		2.900E-04	1.270E-03	1.270E-03	
	EU 124	PER 007		1.200E-03	5.270E-03	5.270E-03	
	EU 129	PER 007		5.060E-05	2.220E-04	2.220E-04	
	FC 000	PER 006					4.490E-03
	FC 000	PER 007					0.000E+00
	GP 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					5.082E-02	5.082E-02	0.000E+00
Benzene							
	EU 063	PER 007		1.179E+00	5.162E+00		
	EU 094	PER 006		1.400E-03			
	EU 094	PER 007		1.510E-03	3.770E-04	3.770E-04	
	EU 096	PER 006		9.470E-06			

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Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Benzene							
	EU 096	PER 007		9.340E-06	4.090E-05	4.090E-05	
	EU 097	PER 007		1.179E+00	5.162E+00		
	EU 110	PER 006		1.420E-05			
	EU 110	PER 007		1.400E-05	6.130E-05	6.130E-05	
	EU 111	PER 006		1.420E-05			
	EU 111	PER 007		1.400E-05	6.130E-05	6.130E-05	
	EU 112	PER 006		1.220E-05			
	EU 112	PER 007		1.200E-05	5.260E-05	5.260E-05	
	EU 113	PER 006		1.440E-05			
	EU 113	PER 007		1.200E-05	5.260E-05	5.260E-05	
	EU 114	PER 006		1.220E-05			
	EU 114	PER 007		1.200E-05	5.260E-05	5.260E-05	
	EU 115	PER 006		2.120E-05			
	EU 115	PER 007		2.090E-05	9.150E-05	9.150E-05	
	EU 116	PER 006		1.920E-05			
	EU 116	PER 007		1.890E-05	8.280E-05	8.280E-05	
	EU 117	PER 006		1.920E-05			
	EU 117	PER 007		1.890E-05	8.280E-05	8.280E-05	
	EU 122	PER 006		3.980E-03			
	EU 122	PER 007		3.240E-03	1.420E-02	1.420E-02	
	EU 123	PER 006		2.800E-03			
	EU 123	PER 007		2.930E-03	1.280E-02	1.280E-02	
	EU 124	PER 007		1.460E-03	6.410E-03	6.410E-03	
	EU 126	PER 007		1.170E-05	5.110E-05	5.110E-05	
	EU 127	PER 007		1.000E-05	4.380E-05	4.380E-05	
	EU 128	PER 007		5.000E-06	2.190E-05	2.190E-05	
	EU 129	PER 007		6.160E-05	2.700E-04	2.700E-04	
	FC 000	PER 006					8.360E-01
	FC 000	PER 007					0.000E+00
	GP 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
	GP 020	PER 007				9.000E+00	
Totals					1.036E+01	9.035E+00	0.000E+00
Arsenic compounds							
	EU 096	PER 006		8.900E-07			
	EU 096	PER 007		8.900E-07	3.900E-06	3.900E-06	

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Arsenic compounds							
	EU 110	PER 006		1.330E-06			
	EU 110	PER 007		1.330E-06	5.840E-06	5.840E-06	
	EU 111	PER 006		1.330E-06			
	EU 111	PER 007		1.330E-06	5.840E-06	5.840E-06	
	EU 112	PER 006		1.140E-06			
	EU 112	PER 007		1.140E-06	5.010E-06	5.010E-06	
	EU 113	PER 006		1.140E-06			
	EU 113	PER 007		1.140E-06	5.010E-06	5.010E-06	
	EU 114	PER 006		1.140E-06			
	EU 114	PER 007		1.140E-06	5.010E-06	5.010E-06	
	EU 115	PER 006		1.990E-06			
	EU 115	PER 007		1.990E-06	8.720E-06	8.720E-06	
	EU 116	PER 006		1.800E-06			
	EU 116	PER 007		1.800E-06	7.880E-06	7.880E-06	
	EU 117	PER 006		1.800E-06			
	EU 117	PER 007		1.800E-06	7.880E-06	7.880E-06	
	EU 126	PER 007		1.110E-06	4.870E-06	4.870E-06	
	EU 127	PER 007		9.520E-07	4.170E-06	4.170E-06	
	EU 128	PER 007		4.760E-07	2.090E-06	2.090E-06	
	FC 000	PER 006					5.510E-05
	FC 000	PER 007					0.000E+00
Totals					6.622E-05	6.622E-05	0.000E+00
Biphenyl							
	EU 122	PER 006		8.100E-06			
	EU 122	PER 007		0.000E+00			
	FC 000	PER 006					2.030E-06
	FC 000	PER 007					0.000E+00
Totals					0.000E+00	0.000E+00	0.000E+00
1,3-Butadiene							
	EU 094	PER 006		5.870E-05			
	EU 094	PER 007		6.320E-05	2.770E-04	2.770E-04	
	EU 122	PER 006		1.680E-03			
	EU 122	PER 007		0.000E+00			
	EU 123	PER 006		1.170E-04			
	EU 123	PER 007		1.230E-04	5.370E-04	5.370E-04	

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1,3-Butadiene							
	EU 124	PER 007		6.130E-05	2.690E-04	2.690E-04	
	EU 129	PER 007		2.580E-06	1.130E-05	1.130E-05	
	FC 000	PER 006					4.650E-04
	FC 000	PER 007					0.000E+00
Totals					1.094E-03	1.094E-03	0.000E+00
Beryllium							
	EU 096	PER 006		5.340E-08			
	EU 096	PER 007		5.340E-08	2.340E-07	2.340E-07	
	EU 110	PER 006		8.000E-08			
	EU 110	PER 007		8.000E-08	3.500E-07	3.500E-07	
	EU 111	PER 006		8.000E-08			
	EU 111	PER 007		8.000E-08	3.500E-07	3.500E-07	
	EU 112	PER 006		6.860E-08			
	EU 112	PER 007		6.860E-08	3.000E-07	3.000E-07	
	EU 113	PER 006		6.860E-08			
	EU 113	PER 007		6.860E-08	3.000E-07	3.000E-07	
	EU 114	PER 006		6.860E-08			
	EU 114	PER 007		6.860E-08	3.000E-07	3.000E-07	
	EU 115	PER 006		1.190E-07			
	EU 115	PER 007		1.190E-07	5.230E-07	5.230E-07	
	EU 116	PER 006		1.080E-07			
	EU 116	PER 007		1.080E-07	4.730E-07	4.730E-07	
	EU 117	PER 006		1.080E-07			
	EU 117	PER 007		1.080E-07	4.730E-07	4.730E-07	
	EU 126	PER 007		6.670E-08	2.920E-07	2.920E-07	
	EU 127	PER 007		5.710E-08	2.500E-07	2.500E-07	
	EU 128	PER 007		2.860E-08	1.250E-07	1.250E-07	
	FC 000	PER 006					3.300E-06
	FC 000	PER 007					0.000E+00
Totals					3.970E-06	3.970E-06	0.000E+00
Carbon tetrachloride							
	EU 122	PER 006		1.250E-04			
	EU 122	PER 007		3.630E-05	1.590E-04	1.590E-04	
	FC 000	PER 006					3.110E-05

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Carbon tetrachloride							
	FC 000	PER 007					0.000E+00
Totals					1.590E-04	1.590E-04	0.000E+00
Carbon Dioxide Equivalent							
	EU 094	PER 007		2.519E+02	1.100E+03	1.100E+03	
	EU 096	PER 007		6.524E+02	2.858E+03	2.858E+03	
	EU 110	PER 007		9.780E+02	4.283E+03	4.283E+03	
	EU 111	PER 007		9.780E+02	4.283E+03	4.283E+03	
	EU 112	PER 007		8.382E+02	3.672E+03	3.672E+03	
	EU 113	PER 007		8.382E+02	3.672E+03	3.672E+03	
	EU 114	PER 007		8.382E+02	3.672E+03	3.672E+03	
	EU 115	PER 007		1.460E+03	6.395E+03	6.395E+03	
	EU 116	PER 007		1.320E+03	5.783E+03	5.783E+03	
	EU 117	PER 007		1.320E+03	5.783E+03	5.783E+03	
	EU 122	PER 007			1.220E+03	1.220E+03	
	EU 123	PER 007		3.450E+02	1.511E+03	1.511E+03	
	EU 124	PER 007		2.300E+02	1.007E+03	1.007E+03	
	EU 126	PER 007		8.148E+02	3.569E+03	3.569E+03	
	EU 127	PER 007		6.985E+02	3.060E+03	3.060E+03	
	EU 128	PER 007		3.493E+02	1.530E+03	1.530E+03	
	EU 129	PER 007			2.250E+00	2.250E+00	
Totals					5.340E+04	5.340E+04	0.000E+00
Chlorobenzene							
	EU 122	PER 006		9.120E-05			
	EU 122	PER 007		2.650E-05	1.160E-04	1.160E-04	
	FC 000	PER 006					2.280E-05
	FC 000	PER 007					0.000E+00
Totals					1.160E-04	1.160E-04	0.000E+00
Chloroform							
	EU 122	PER 006		9.660E-05			
	EU 122	PER 007		2.810E-05	1.230E-04	1.230E-04	
	FC 000	PER 006					2.420E-05
	FC 000	PER 007					0.000E+00
Totals					1.230E-04	1.230E-04	0.000E+00
Cadmium compounds							
	EU 096	PER 006		4.890E-06			
	EU 096	PER 007		4.890E-06	2.140E-05	2.140E-05	

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Cadmium compounds							
	EU 110	PER 006		7.330E-06			
	EU 110	PER 007		7.330E-06	3.210E-05	3.210E-05	
	EU 111	PER 006		7.330E-06			
	EU 111	PER 007		7.330E-06	3.210E-05	3.210E-05	
	EU 112	PER 006		6.290E-06			
	EU 112	PER 007		6.290E-06	2.750E-05	2.750E-05	
	EU 113	PER 006		6.290E-06			
	EU 113	PER 007		6.290E-06	2.750E-05	2.750E-05	
	EU 114	PER 006		6.290E-06			
	EU 114	PER 007		6.290E-06	2.750E-05	2.750E-05	
	EU 115	PER 006		1.090E-05			
	EU 115	PER 007		1.090E-05	4.800E-05	4.800E-05	
	EU 116	PER 006		9.900E-06			
	EU 116	PER 007		9.900E-06	4.340E-05	4.340E-05	
	EU 117	PER 006		9.900E-06			
	EU 117	PER 007		9.900E-06	4.340E-05	4.340E-05	
	EU 126	PER 007		6.110E-06	2.680E-05	2.680E-05	
	EU 127	PER 007		5.240E-06	2.290E-05	2.290E-05	
	EU 128	PER 007		2.620E-06	1.150E-05	1.150E-05	
	FC 000	PER 006					3.030E-04
	FC 000	PER 007					0.000E+00
Totals					3.641E-04	3.641E-04	0.000E+00
Methane							
	EU 096	PER 007		1.000E-02	4.000E-02	4.000E-02	
	EU 110	PER 007		2.000E-02	7.000E-02	7.000E-02	
	EU 111	PER 007		2.000E-02	7.000E-02	7.000E-02	
	EU 112	PER 007		1.000E-02	6.000E-02	6.000E-02	
	EU 113	PER 007		1.000E-02	6.000E-02	6.000E-02	
	EU 114	PER 007		1.000E-02	6.000E-02	6.000E-02	
	EU 115	PER 007		2.000E-02	1.000E-01	1.000E-01	
	EU 116	PER 007		2.000E-02	9.000E-02	9.000E-02	
	EU 117	PER 007		2.000E-02	9.000E-02	9.000E-02	
	EU 122	PER 007		2.565E+00	1.123E+01	1.123E+01	
	EU 126	PER 007		1.000E-02	6.000E-02	6.000E-02	
	EU 127	PER 007		1.000E-02	5.000E-02	5.000E-02	

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Methane							
	EU 128	PER 007		1.000E-02	2.000E-02	2.000E-02	
	EU 129	PER 007		8.300E-02	2.060E-02	2.060E-02	
Totals					1.202E+01	1.202E+01	0.000E+00
Carbon Monoxide							
	EU 037	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 094	PER 006		1.463E+00			
	EU 094	PER 007		1.463E+00	6.410E+00	6.410E+00	
	EU 096	PER 006		3.738E-01			
	EU 096	PER 007		3.800E-01	1.680E+00	1.680E+00	
	EU 110	PER 006		5.599E-01			
	EU 110	PER 007		5.700E-01	2.510E+00	2.510E+00	
	EU 111	PER 006		5.599E-01			
	EU 111	PER 007		5.700E-01	2.510E+00	2.510E+00	
	EU 112	PER 006		4.800E-01			
	EU 112	PER 007		4.900E-01	2.150E+00	2.150E+00	
	EU 113	PER 006		4.800E-01			
	EU 113	PER 007		4.900E-01	2.150E+00	2.150E+00	
	EU 114	PER 006		4.800E-01			
	EU 114	PER 007		4.900E-01	2.150E+00	2.150E+00	
	EU 115	PER 006		8.360E-01			
	EU 115	PER 007		8.600E-01	3.750E+00	3.660E+00	0.000E+00
	EU 116	PER 006		7.560E-01			
	EU 116	PER 007		7.700E-01	3.390E+00	3.390E+00	
	EU 117	PER 006		7.560E-01			
	EU 117	PER 007		7.700E-01	3.390E+00	3.390E+00	
	EU 122	PER 006		8.402E-01			
	EU 122	PER 007		6.500E-01	2.850E+00	2.850E+00	
	EU 123	PER 006		2.672E+00			
	EU 123	PER 007		2.004E+00	8.780E+00	8.780E+00	
	EU 124	PER 007		1.340E+00	5.850E+00	5.850E+00	
	EU 126	PER 007		4.800E-01	2.900E+00	2.090E+00	
	EU 127	PER 007		4.100E-01	1.800E+00	1.800E+00	
	EU 128	PER 007		2.000E-01	9.000E-01	9.000E-01	
	EU 129	PER 007		2.100E-02	5.230E-03	5.230E-02	
	FC 000	PER 006					2.730E+00

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Carbon Monoxide							
	FC 000	PER 007					0.000E+00
	SV 008	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 012	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 025	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 026	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 035	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 041	PER 006		0.000E+00	0.000E+00	0.000E+00	0.000E+00
Totals					5.318E+01	5.232E+01	0.000E+00
Carbon Dioxide							
	EU 094	PER 007		2.519E+02	1.100E+03	1.100E+03	
	EU 096	PER 007		6.380E+02	2.794E+03	2.794E+03	
	EU 110	PER 007		9.563E+02	4.189E+03	4.189E+03	
	EU 111	PER 007		9.563E+02	4.189E+03	4.189E+03	
	EU 112	PER 007		8.197E+02	3.590E+03	3.590E+03	
	EU 113	PER 007		8.197E+02	3.590E+03	3.590E+03	
	EU 114	PER 007		8.197E+02	3.590E+03	3.590E+03	
	EU 115	PER 007		1.428E+03	6.253E+03	6.253E+03	
	EU 116	PER 007		1.291E+03	5.655E+03	5.655E+03	
	EU 117	PER 007		1.291E+03	5.655E+03	5.655E+03	
	EU 122	PER 007		2.257E+02	9.885E+02	9.885E+02	
	EU 123	PER 007		3.450E+02	1.511E+03	1.511E+03	
	EU 124	PER 007		2.300E+02	1.007E+03	1.007E+03	
	EU 126	PER 007		7.967E+02	3.490E+03	3.490E+03	
	EU 127	PER 007		6.831E+02	2.992E+03	2.992E+03	
	EU 128	PER 007		3.415E+02	1.496E+03	1.496E+03	
	EU 129	PER 007		7.260E+00	1.820E+00	1.820E+00	
Totals					5.209E+04	5.209E+04	0.000E+00
Cobalt compounds							
	EU 096	PER 007		3.740E-07	1.640E-06	1.640E-06	
	EU 110	PER 007		5.600E-07	2.450E-06	2.450E-06	
	EU 111	PER 007		5.600E-07	2.450E-06	2.450E-06	
	EU 112	PER 007		4.800E-07	2.100E-06	2.100E-06	
	EU 113	PER 007		4.800E-07	2.100E-06	2.100E-06	
	EU 114	PER 007		4.800E-07	2.100E-06	2.100E-06	
	EU 115	PER 007		8.360E-07	3.660E-06	3.660E-06	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Cobalt compounds							
	EU 116	PER 007		7.560E-07	3.310E-06	3.310E-06	
	EU 117	PER 007		7.560E-07	3.310E-06	3.310E-06	
	EU 126	PER 007		4.670E-07	2.040E-06	2.040E-06	
	EU 127	PER 007		4.000E-07	1.750E-06	1.750E-06	
	EU 128	PER 007		2.000E-07	8.760E-07	8.760E-07	
Totals					2.779E-05	2.779E-05	0.000E+00
Chromium compounds							
	EU 096	PER 006		6.230E-06			
	EU 096	PER 007		6.230E-06	2.730E-05	2.730E-05	
	EU 110	PER 006		9.330E-06			
	EU 110	PER 007		9.330E-06	4.090E-05	4.090E-05	
	EU 111	PER 006		9.330E-06			
	EU 111	PER 007		9.330E-06	4.090E-05	4.090E-05	
	EU 112	PER 006		8.000E-06			
	EU 112	PER 007		8.000E-06	3.500E-05	3.500E-05	
	EU 113	PER 006		8.000E-06			
	EU 113	PER 007		8.000E-06	3.500E-05	3.500E-05	
	EU 114	PER 006		8.000E-06			
	EU 114	PER 007		8.000E-06	3.500E-05	3.500E-05	
	EU 115	PER 006		1.390E-05			
	EU 115	PER 007		1.390E-05	6.100E-05	6.100E-05	
	EU 116	PER 006		1.260E-05			
	EU 116	PER 007		1.260E-05	5.520E-05	5.520E-05	
	EU 117	PER 006		1.260E-05			
	EU 117	PER 007		1.260E-05	5.520E-05	5.520E-05	
	EU 126	PER 007		7.780E-06	3.410E-05	3.410E-05	
	EU 127	PER 007		6.670E-06	2.920E-05	2.920E-05	
	EU 128	PER 007		3.330E-06	1.460E-05	1.460E-05	
	FC 000	PER 006					3.860E-04
	FC 000	PER 007					0.000E+00
Totals					4.634E-04	4.634E-04	0.000E+00
1,4-Dichlorobenzene							
	EU 096	PER 006		5.340E-06			
	EU 096	PER 007		5.340E-06	2.340E-05	2.340E-05	
	EU 110	PER 006		8.000E-06			

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
1,4-Dichlorobenzene							
	EU 110	PER 007		8.000E-06	3.500E-05	3.500E-05	
	EU 111	PER 006		8.000E-06			
	EU 111	PER 007		8.000E-06	3.500E-05	3.500E-05	
	EU 112	PER 006		6.860E-06			
	EU 112	PER 007		6.860E-06	3.000E-05	3.000E-05	
	EU 113	PER 006		6.860E-06			
	EU 113	PER 007		6.860E-06	3.000E-05	3.000E-05	
	EU 114	PER 006		6.860E-06			
	EU 114	PER 007		6.860E-06	3.000E-05	3.000E-05	
	EU 115	PER 006		1.190E-05			
	EU 115	PER 007		1.190E-05	5.230E-05	5.230E-05	
	EU 116	PER 006		1.080E-05			
	EU 116	PER 007		1.080E-05	4.730E-05	4.730E-05	
	EU 117	PER 006		1.080E-05			
	EU 117	PER 007		1.080E-05	4.730E-05	4.730E-05	
	EU 126	PER 007		6.670E-06	2.920E-05	2.920E-05	
	EU 127	PER 007		5.710E-06	2.500E-05	2.500E-05	
	EU 128	PER 007		2.860E-06	1.250E-05	1.250E-05	
	FC 000	PER 006					3.300E-04
	FC 000	PER 007					0.000E+00
Totals					3.970E-04	3.970E-04	0.000E+00
1,2-Dichloroethane							
	FC 000	PER 006					2.250E-05
	FC 000	PER 007					0.000E+00
Totals					0.000E+00	0.000E+00	0.000E+00
1,2-Dichloropropane							
	EU 122	PER 006		8.990E-05			
	EU 122	PER 007		0.000E+00			
Totals					0.000E+00	0.000E+00	0.000E+00
1,3-Dichloropropene							
	EU 122	PER 007		2.610E-05	1.140E-04	1.140E-04	
Totals					1.140E-04	1.140E-04	0.000E+00
Ethylbenzene							
	EU 003	PER 006		2.833E+00			
	EU 003	PER 007		2.840E+00	1.243E+01		
	EU 057	PER 007		2.600E-01	1.140E+00		

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Ethylbenzene							
	EU 103	PER 007		2.300E-01	1.000E+00		
	EU 118	PER 006		2.302E+01			
	EU 118	PER 007		1.920E+01	8.410E+01		
	EU 119	PER 006		3.840E+00			
	EU 119	PER 007		3.840E+00	1.682E+01		
	EU 122	PER 006		2.220E-04			
	EU 122	PER 007		5.090E-05	2.230E-04	2.230E-04	
	EU 125	PER 007		1.300E-01	5.700E-01		
	FC 000	PER 006					4.180E-01
	FC 000	PER 007					0.000E+00
	GP 020	PER 007				9.000E+00	
Totals					1.161E+02	9.000E+00	0.000E+00
Ethylene glycol							
	EU 003	PER 006		3.420E-01	0.000E+00	0.000E+00	
	EU 003	PER 007		3.420E-01	1.500E+00	1.500E+00	
	FC 000	PER 006					4.000E-03
	FC 000	PER 007					0.000E+00
Totals					1.500E+00	1.500E+00	0.000E+00
Formaldehyde							
	EU 063	PER 007		2.160E-02	9.440E-02	9.440E-02	
	EU 094	PER 006		1.770E-03			
	EU 094	PER 007		1.910E-03	8.360E-03	8.360E-03	
	EU 096	PER 006		3.340E-04			
	EU 096	PER 007		3.340E-04	1.460E-03	1.460E-03	
	EU 097	PER 007		2.160E-02	9.440E-02	9.440E-02	
	EU 110	PER 006		5.000E-04			
	EU 110	PER 007		5.000E-04	2.190E-03	2.190E-03	
	EU 111	PER 006		5.000E-04			
	EU 111	PER 007		5.000E-04	2.190E-03	2.190E-03	
	EU 112	PER 006		4.290E-04			
	EU 112	PER 007		4.290E-04	1.880E-03	1.880E-03	
	EU 113	PER 006		4.390E-04			
	EU 113	PER 007		4.290E-04	1.880E-03	1.880E-03	
	EU 114	PER 006		4.290E-04			
	EU 114	PER 007		4.290E-04	1.880E-03	1.880E-03	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Formaldehyde							
	EU 115	PER 006		7.460E-04			
	EU 115	PER 007		7.460E-04	3.270E-03	3.270E-03	
	EU 116	PER 006		6.750E-04			
	EU 116	PER 007		6.750E-04	2.960E-03	2.960E-03	
	EU 117	PER 006		6.750E-04			
	EU 117	PER 007		6.750E-04	2.960E-03	2.960E-03	
	EU 122	PER 006		1.130E-01			
	EU 122	PER 007		4.210E-02	1.840E-01	1.840E-01	
	EU 123	PER 006		3.540E-03			
	EU 123	PER 007		3.700E-03	1.620E-02	1.620E-02	
	EU 124	PER 007		6.130E-05	2.690E-04	2.690E-04	
	EU 126	PER 007		4.170E-04	1.820E-03	1.820E-03	
	EU 127	PER 007		3.570E-04	1.560E-03	1.560E-03	
	EU 128	PER 007		1.790E-04	7.820E-04	7.820E-04	
	EU 129	PER 007		2.580E-06	1.130E-05	1.130E-05	
	FC 000	PER 006					1.250E-01
	FC 000	PER 007					0.000E+00
	GP 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 002	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					4.225E-01	4.225E-01	0.000E+00
Hexane							
	EU 096	PER 006		8.010E-03			
	EU 096	PER 007		8.010E-03	3.510E-02	3.510E-02	
	EU 110	PER 006		1.200E-02			
	EU 110	PER 007		1.200E-02	5.260E-02	5.260E-02	
	EU 111	PER 006		1.200E-02			
	EU 111	PER 007		1.200E-02	5.260E-02	5.260E-02	
	EU 112	PER 006		1.030E-02			
	EU 112	PER 007		1.030E-02	4.510E-02	4.510E-02	
	EU 113	PER 006		1.030E-02			
	EU 113	PER 007		1.030E-02	4.510E-02	4.510E-02	
	EU 114	PER 006		1.030E-02			
	EU 114	PER 007		1.030E-02	4.510E-02	4.510E-02	
	EU 115	PER 006		1.790E-02			

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Hexane							
	EU 115	PER 007		1.790E-02	7.850E-02	7.850E-02	
	EU 116	PER 006		1.620E-02			
	EU 116	PER 007		1.620E-02	7.100E-02	7.100E-02	
	EU 117	PER 006		1.620E-02			
	EU 117	PER 007		1.620E-02	7.100E-02	7.100E-02	
	EU 122	PER 006		9.130E-04			
	EU 122	PER 007		0.000E+00			
	EU 126	PER 007		1.000E-02	4.380E-02	4.380E-02	
	EU 127	PER 007		8.570E-03	3.750E-02	3.750E-02	
	EU 128	PER 007		4.290E-03	1.880E-02	1.880E-02	
	FC 000	PER 006					4.960E-01
	FC 000	PER 007					0.000E+00
Totals					5.962E-01	5.962E-01	0.000E+00
Methanol							
	EU 122	PER 006		5.090E-03			
	EU 122	PER 007		6.280E-03	2.750E-02	2.750E-02	
	FC 000	PER 006					1.270E-03
	FC 000	PER 007					0.000E+00
Totals					2.750E-02	2.750E-02	0.000E+00
Methyl ethyl ketone (MEK)							
	GP 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Methyl isobutyl ketone							
	EU 003	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 057	PER 007		5.200E-01	2.270E+00		
	EU 118	PER 006		3.056E+01			
	EU 118	PER 007		2.545E+01	1.115E+02		
	EU 119	PER 006		5.090E+00			
	EU 119	PER 007		5.090E+00	2.229E+01		
	FC 000	PER 006					6.260E-01
	FC 000	PER 007					0.000E+00
	GP 020	PER 007				8.500E+00	
	SV 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 002	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					1.360E+02	8.500E+00	0.000E+00

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
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Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Naphthalene							
	EU 063	PER 007		8.100E-03	3.540E-02	3.540E-02	
	EU 094	PER 007		1.370E-04	6.010E-04	6.010E-04	
	EU 096	PER 006		2.710E-06			
	EU 096	PER 007		2.710E-06	1.190E-05	1.190E-05	
	EU 097	PER 007		8.100E-03	3.540E-02	3.540E-02	
	EU 110	PER 006		4.170E-06			
	EU 110	PER 007		4.070E-06	1.780E-05	1.780E-05	
	EU 111	PER 006		4.070E-06			
	EU 111	PER 007		4.070E-06	1.780E-05	1.780E-05	
	EU 112	PER 006		3.490E-06			
	EU 112	PER 007		3.490E-06	1.530E-05	1.530E-05	
	EU 113	PER 006		3.490E-06			
	EU 113	PER 007		3.490E-06	1.530E-05	1.530E-05	
	EU 114	PER 006		3.490E-06			
	EU 114	PER 007		3.490E-06	1.530E-05	1.530E-05	
	EU 115	PER 006		6.070E-06			
	EU 115	PER 007		6.070E-06	2.660E-05	2.660E-05	
	EU 116	PER 006		5.490E-06			
	EU 116	PER 007		5.490E-06	2.400E-05	2.400E-05	
	EU 117	PER 006		5.490E-06			
	EU 117	PER 007		5.490E-06	2.400E-05	2.400E-05	
	EU 122	PER 007		1.990E-04	8.730E-04	8.730E-04	
	EU 123	PER 007		2.660E-04	1.170E-03	1.170E-03	
	EU 124	PER 007		1.330E-04	5.830E-04	5.830E-04	
	EU 126	PER 007		3.390E-06	1.480E-05	1.480E-05	
	EU 127	PER 007		2.900E-06	1.270E-05	1.270E-05	
	EU 128	PER 007		1.450E-06	6.360E-06	6.360E-06	
	EU 129	PER 007		5.600E-06	2.450E-05	2.450E-05	
	FC 000	PER 006					3.130E-04
	FC 000	PER 007					0.000E+00
	GP 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					7.425E-02	7.425E-02	0.000E+00
HAPs - Total							
	EU 003	PER 006		1.085E+01	0.000E+00		
	EU 003	PER 007		1.085E+01	4.753E+01		

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

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Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
HAPs - Total							
	EU 037	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 057	PER 006		1.080E+00			
	EU 057	PER 007		3.090E+00	1.356E+01		
	EU 060	PER 007		9.900E-03	4.320E-02		
	EU 063	PER 007		1.810E+00	7.926E+00		
	EU 066	PER 007		3.220E-01	1.410E+00		
	EU 068	PER 007		9.900E-03	4.320E-02	0.000E+00	
	EU 069	PER 007		9.900E-03	4.320E-02		
	EU 070	PER 007		9.900E-03	4.320E-02		
	EU 094	PER 006		6.200E-03			
	EU 094	PER 007		1.040E-02	4.570E-02	4.570E-02	
	EU 096	PER 006		8.400E-03			
	EU 096	PER 007		8.400E-03	3.680E-02	3.680E-02	
	EU 097	PER 007		1.810E+00	7.926E+00		
	EU 103	PER 006		6.920E-02			
	EU 103	PER 007		4.400E-01	1.920E+00		
	EU 110	PER 006		1.260E-02			
	EU 110	PER 007		1.260E-02	5.510E-02	5.510E-02	
	EU 111	PER 006		1.260E-02			
	EU 111	PER 007		1.260E-02	5.510E-02	5.510E-02	
	EU 112	PER 006		1.080E-02			
	EU 112	PER 007		1.080E-02	4.730E-02	4.730E-02	
	EU 113	PER 006		1.080E-02			
	EU 113	PER 007		1.080E-02	4.730E-02	4.730E-02	
	EU 114	PER 006		1.080E-02			
	EU 114	PER 007		1.080E-02	4.730E-02	4.730E-02	
	EU 115	PER 006		1.880E-02			
	EU 115	PER 007		1.880E-02	8.230E-02	8.230E-02	
	EU 116	PER 006		1.700E-02			
	EU 116	PER 007		1.700E-02	7.440E-02	7.440E-02	
	EU 117	PER 006		1.700E-02			
	EU 117	PER 007		1.700E-02	7.440E-02	7.440E-02	
	EU 118	PER 006		4.186E+01			
	EU 118	PER 007		5.905E+01	2.586E+02		
	EU 119	PER 006		6.980E+00			

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

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Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
HAPs - Total							
	EU 119	PER 007		1.181E+01	5.173E+01		
	EU 122	PER 006		1.630E-01			
	EU 122	PER 007		6.520E-02	2.860E-01	2.860E-01	0.000E+00
	EU 123	PER 006		1.240E-02			
	EU 123	PER 007		2.030E-02	8.870E-02	8.870E-02	
	EU 124	PER 007		9.910E-03	4.340E-02	4.340E-02	
	EU 125	PER 007		9.000E-01	3.920E+00		
	EU 126	PER 007		1.050E-02	4.590E-02	4.590E-02	
	EU 127	PER 007		8.990E-03	3.940E-02	3.940E-02	
	EU 128	PER 007		4.500E-03	1.970E-02	1.970E-02	
	EU 129	PER 007		4.170E-04	1.830E-03	1.830E-03	
	FC 000	PER 006					5.670E+00
	FC 000	PER 007					0.000E+00
	GP 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
	GP 002	PER 006				0.000E+00	
	GP 021	PER 007				2.050E+01	
	SV 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 002	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 012	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 025	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 026	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 035	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 042	PER 006		0.000E+00	0.000E+00	0.000E+00	0.000E+00
Totals					3.958E+02	2.159E+01	0.000E+00
Mercury							
	EU 096	PER 006		1.160E-06			
	EU 096	PER 007		1.160E-06	5.060E-06	5.060E-06	
	EU 110	PER 006		1.730E-06			
	EU 110	PER 007		1.730E-06	7.590E-06	7.590E-06	
	EU 111	PER 006		1.730E-06			
	EU 111	PER 007		1.730E-06	7.590E-06	7.590E-06	
	EU 112	PER 006		1.490E-06			
	EU 112	PER 007		1.490E-06	6.510E-06	6.510E-06	
	EU 113	PER 006		1.490E-06			
	EU 113	PER 007		1.490E-06	6.510E-06	6.510E-06	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

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AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Mercury							
	EU 114	PER 006		1.490E-06			
	EU 114	PER 007		1.490E-06	6.510E-06	6.510E-06	
	EU 115	PER 006		2.590E-06			
	EU 115	PER 007		2.590E-06	1.130E-05	1.130E-05	
	EU 116	PER 006		2.340E-06			
	EU 116	PER 007		2.340E-06	1.020E-05	1.020E-05	
	EU 117	PER 006		2.340E-06			
	EU 117	PER 007		2.340E-06	1.020E-05	1.020E-05	
	EU 126	PER 007		1.440E-06	6.330E-06	6.330E-06	
	EU 127	PER 007		1.240E-06	5.420E-06	5.420E-06	
	EU 128	PER 007		6.190E-07	2.710E-06	2.710E-06	
	FC 000	PER 006					7.160E-05
	FC 000	PER 007					0.000E+00
Totals					8.593E-05	8.593E-05	0.000E+00
Phenol							
	EU 063	PER 007		1.208E-01	5.289E-01	5.289E-01	
	EU 097	PER 007		1.208E-01	5.289E-01	5.289E-01	
	EU 122	PER 006		8.640E-05			
	EU 122	PER 007		0.000E+00			
	FC 000	PER 006					5.590E-01
	FC 000	PER 007					0.000E+00
	GP 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 002	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					1.058E+00	1.058E+00	0.000E+00
Propylene oxide							
	EU 094	PER 007		4.170E-03	1.830E-02	1.830E-02	
	EU 123	PER 007		8.100E-03	3.550E-02	3.550E-02	
	EU 124	PER 007		4.050E-03	1.770E-02	1.770E-02	
	EU 129	PER 007		1.700E-04	7.460E-04	7.460E-04	
Totals					7.225E-02	7.225E-02	0.000E+00
Styrene							
	EU 122	PER 006		1.120E-04			
	EU 122	PER 007		2.440E-05	1.070E-04	1.070E-04	
	FC 000	PER 006					2.810E-05

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Styrene							
	FC 000	PER 007					0.000E+00
Totals					1.070E-04	1.070E-04	0.000E+00
1,1,2,2-Tetrachloroethane							
	EU 122	PER 006		1.360E-04			
	EU 122	PER 007		5.190E-05	2.270E-04	2.270E-04	
	FC 000	PER 006					3.400E-05
	FC 000	PER 007					0.000E+00
Totals					2.270E-04	2.270E-04	0.000E+00
Toluene							
	EU 003	PER 006		1.080E+00			
	EU 003	PER 007		1.080E+00	4.720E+00		
	EU 057	PER 006		1.080E+00			
	EU 057	PER 007		9.100E-01	3.980E+00		
	EU 063	PER 007		2.241E-01	9.815E-01		
	EU 094	PER 006		6.140E-04			
	EU 094	PER 007		6.610E-04	2.900E-03	2.900E-03	
	EU 096	PER 006		1.510E-05			
	EU 096	PER 007		1.510E-05	6.620E-05	6.620E-05	
	EU 097	PER 007		2.241E-01	9.815E-01		
	EU 110	PER 006		2.270E-05			
	EU 110	PER 007		2.270E-05	9.930E-05	9.930E-05	
	EU 111	PER 006		2.270E-05			
	EU 111	PER 007		2.270E-05	9.930E-05	9.930E-05	
	EU 112	PER 006		1.940E-05			
	EU 112	PER 007		1.940E-05	8.510E-05	8.510E-05	
	EU 113	PER 006		1.940E-05			
	EU 113	PER 007		1.940E-05	8.510E-05	8.510E-05	
	EU 114	PER 006		1.940E-05			
	EU 114	PER 007		1.940E-05	8.510E-05	8.510E-05	
	EU 115	PER 006		3.380E-05			
	EU 115	PER 007		3.380E-05	1.480E-04	1.480E-04	
	EU 116	PER 006		3.060E-05			
	EU 116	PER 007		3.060E-05	1.340E-04	1.340E-04	
	EU 117	PER 006		3.060E-05			
	EU 117	PER 007		3.060E-05	1.340E-04	1.340E-04	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Toluene							
	EU 122	PER 006		1.980E-03			
	EU 122	PER 007		1.140E-03	5.010E-03	5.010E-03	
	EU 123	PER 006		1.230E-03			
	EU 123	PER 007		1.280E-03	5.620E-03	5.620E-03	
	EU 124	PER 007		6.420E-04	2.810E-03	2.810E-03	
	EU 126	PER 007		1.890E-05	8.270E-05	8.270E-05	
	EU 127	PER 007		1.620E-05	7.090E-05	7.090E-05	
	EU 128	PER 007		8.100E-06	3.550E-05	3.550E-05	
	EU 129	PER 007		2.700E-05	1.180E-04	1.180E-04	
	FC 000	PER 006					1.260E+00
	FC 000	PER 007					0.000E+00
	GP 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
	GP 002	PER 006				0.000E+00	
	GP 020	PER 007				9.000E+00	
Totals					1.068E+01	9.018E+00	0.000E+00
1,1,2-Trichloroethane							
	EU 122	PER 006		1.080E-04			
	EU 122	PER 007		3.140E-05	1.370E-04	1.370E-04	
	FC 000	PER 006					2.700E-05
	FC 000	PER 007					0.000E+00
Totals					1.370E-04	1.370E-04	0.000E+00
Vinyl chloride							
	EU 122	PER 006		5.070E-05			
	EU 122	PER 007		1.470E-05	6.450E-05	6.450E-05	
	FC 000	PER 006					1.270E-05
	FC 000	PER 007					0.000E+00
Totals					6.450E-05	6.450E-05	0.000E+00
Xylenes (mixed isomers)							
	EU 003	PER 006		6.503E+00	0.000E+00		
	EU 003	PER 007		6.503E+00	2.846E+01		
	EU 057	PER 007		1.410E+00	6.170E+00		
	EU 063	PER 007		2.385E-01	1.045E+00		
	EU 094	PER 006		4.280E-04			
	EU 094	PER 007		4.610E-04	2.020E-03	2.020E-03	
	EU 097	PER 007		2.385E-01	1.045E+00		

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Xylenes (mixed isomers)							
	EU 103	PER 006		6.920E-02			
	EU 103	PER 007		2.100E-01	9.200E-01		
	EU 118	PER 006		1.727E+01			
	EU 118	PER 007		1.440E+01	6.307E+01		
	EU 119	PER 006		2.880E+00			
	EU 119	PER 007		2.880E+00	1.261E+01		
	EU 122	PER 006		5.500E-04			
	EU 122	PER 007		4.000E-04	1.750E-03	1.750E-03	
	EU 123	PER 006		8.550E-04			
	EU 123	PER 007		8.940E-04	3.920E-03	3.920E-03	
	EU 124	PER 007		4.470E-04	1.960E-03	1.960E-03	
	EU 125	PER 007		7.700E-01	3.350E+00		
	EU 129	PER 007		1.880E-05	8.240E-05	8.240E-05	
	FC 000	PER 006					9.540E-01
	FC 000	PER 007					0.000E+00
	GP 001	PER 006		0.000E+00	0.000E+00		
	GP 002	PER 006				0.000E+00	
	GP 020	PER 007				8.500E+00	
Totals					1.167E+02	8.510E+00	0.000E+00
2,2,4-trimethylpentane							
	EU 122	PER 006		1.740E-03			
	EU 122	PER 007		0.000E+00			
	FC 000	PER 006					4.340E-04
	FC 000	PER 007					0.000E+00
Totals					0.000E+00	0.000E+00	0.000E+00
Manganese compounds							
	EU 096	PER 006		1.690E-06			
	EU 096	PER 007		1.690E-06	7.400E-06	7.400E-06	
	EU 110	PER 006		2.530E-06			
	EU 110	PER 007		2.530E-06	1.110E-05	1.110E-05	
	EU 111	PER 006		2.530E-06			
	EU 111	PER 007		2.530E-06	1.110E-05	1.110E-05	
	EU 112	PER 006		2.170E-06			
	EU 112	PER 007		2.170E-06	9.510E-06	9.510E-06	
	EU 113	PER 006		2.170E-06			

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Manganese compounds							
	EU 113	PER 007		2.170E-06	9.510E-06	9.510E-06	
	EU 114	PER 006		2.170E-06			
	EU 114	PER 007		2.170E-06	9.510E-06	9.510E-06	
	EU 115	PER 006		3.780E-06			
	EU 115	PER 007		3.780E-06	1.660E-05	1.660E-05	
	EU 116	PER 006		3.420E-06			
	EU 116	PER 007		3.420E-06	1.500E-05	1.500E-05	
	EU 117	PER 006		3.420E-06			
	EU 117	PER 007		3.420E-06	1.500E-05	1.500E-05	
	EU 126	PER 007		2.110E-06	9.240E-06	9.240E-06	
	EU 127	PER 007		1.810E-06	7.930E-06	7.930E-06	
	EU 128	PER 007		9.050E-07	3.960E-06	3.960E-06	
	FC 000	PER 006					1.050E-04
	FC 000	PER 007					0.000E+00
Totals					1.259E-04	1.259E-04	0.000E+00
Ethylene dibromide (dibromoeth							
	EU 122	PER 006		1.510E-04			
	EU 122	PER 007		4.370E-05	1.910E-04	1.910E-04	
	FC 000	PER 006					3.760E-05
	FC 000	PER 007					0.000E+00
Totals					1.910E-04	1.910E-04	0.000E+00
Nitrous Oxide							
	EU 096	PER 007		5.000E-02	2.000E-01	2.000E-01	
	EU 110	PER 007		7.000E-02	3.000E-01	3.000E-01	
	EU 111	PER 007		7.000E-02	3.000E-01	3.000E-01	
	EU 112	PER 007		6.000E-02	2.600E-01	2.600E-01	
	EU 113	PER 007		6.000E-02	2.600E-01	2.600E-01	
	EU 114	PER 007		6.000E-02	2.600E-01	2.600E-01	
	EU 115	PER 007		1.000E-01	4.500E-01	4.500E-01	
	EU 116	PER 007		9.000E-02	4.100E-01	4.100E-01	
	EU 117	PER 007		9.000E-02	4.100E-01	4.100E-01	
	EU 126	PER 007		6.000E-02	2.500E-01	2.500E-01	
	EU 127	PER 007		5.000E-02	2.200E-01	2.200E-01	
	EU 128	PER 007		2.000E-02	1.100E-01	1.100E-01	
Totals					3.430E+00	3.430E+00	0.000E+00

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

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Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Hexamethylene-1,6-diisocyanate							
	EU 003	PER 006		9.100E-02			
	EU 003	PER 007		1.000E-01	4.200E-01	4.200E-01	
Totals					4.200E-01	4.200E-01	0.000E+00
Methylene chloride (dichlorome							
	EU 122	PER 006		3.020E-04			
	EU 122	PER 007		8.450E-05	3.700E-04	3.700E-04	
	FC 000	PER 006					7.540E-05
	FC 000	PER 007					0.000E+00
Totals					3.700E-04	3.700E-04	0.000E+00
Total Polycyclic aromatic hydr							
	EU 094	PER 006		2.520E-04			
	EU 094	PER 007		0.000E+00			
	EU 122	PER 006		2.750E-04			
	EU 122	PER 007		0.000E+00			
	EU 123	PER 006		5.040E-04			
	EU 123	PER 007		0.000E+00	0.000E+00	0.000E+00	
	FC 000	PER 006					2.580E-04
	FC 000	PER 007					0.000E+00
Totals					0.000E+00	0.000E+00	0.000E+00
Nickel compounds							
	EU 066	PER 007		7.360E-02	3.224E-01	3.224E-01	
	EU 096	PER 006		9.340E-06			
	EU 096	PER 007		9.340E-06	4.090E-05	4.090E-05	
	EU 110	PER 006		1.400E-05			
	EU 110	PER 007		1.400E-05	6.130E-05	6.130E-05	
	EU 111	PER 006		1.400E-05			
	EU 111	PER 007		1.400E-05	6.130E-05	6.130E-05	
	EU 112	PER 006		1.200E-05			
	EU 112	PER 007		1.200E-05	5.260E-05	5.260E-05	
	EU 113	PER 006		1.200E-05			
	EU 113	PER 007		1.200E-05	5.260E-05	5.260E-05	
	EU 114	PER 006		1.200E-05			
	EU 114	PER 007		1.200E-05	5.260E-05	5.260E-05	
	EU 115	PER 006		2.090E-05			
	EU 115	PER 007		2.090E-05	9.150E-05	9.150E-05	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

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Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Nickel compounds							
	EU 116	PER 006		1.890E-05			
	EU 116	PER 007		1.890E-05	8.280E-05	8.280E-05	
	EU 117	PER 006		1.890E-05			
	EU 117	PER 007		1.890E-05	8.280E-05	8.280E-05	
	EU 126	PER 007		1.170E-05	5.110E-05	5.110E-05	
	EU 127	PER 007		1.000E-05	4.380E-05	4.380E-05	
	EU 128	PER 007		5.000E-06	2.190E-05	2.190E-05	
	FC 000	PER 006					5.780E-04
	FC 000	PER 007					0.000E+00
Totals					3.231E-01	3.231E-01	0.000E+00
Nitrogen Oxides							
	EU 037	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 066	PER 006		2.000E-02			
	EU 066	PER 007		0.000E+00			
	EU 094	PER 006		6.789E+00			
	EU 094	PER 007		6.789E+00	2.974E+01		
	EU 096	PER 006		7.144E-01			
	EU 096	PER 007		6.600E-01	2.910E+00		
	EU 110	PER 006		1.454E+00			
	EU 110	PER 007		9.900E-01	4.360E+00		
	EU 111	PER 006		1.454E+00			
	EU 111	PER 007		9.900E-01	4.360E+00		
	EU 112	PER 006		1.246E+00			
	EU 112	PER 007		8.500E-01	3.730E+00		
	EU 113	PER 006		1.246E+00			
	EU 113	PER 007		8.500E-01	3.730E+00		
	EU 114	PER 006		1.246E+00			
	EU 114	PER 007		8.500E-01	3.730E+00		
	EU 115	PER 006		1.170E+00			
	EU 115	PER 007		1.480E+00	6.500E+00		
	EU 116	PER 006		1.963E+00			
	EU 116	PER 007		1.340E+00	5.880E+00		
	EU 117	PER 006		1.963E+00			
	EU 117	PER 007		1.340E+00	5.880E+00	0.000E+00	
	EU 122	PER 006		6.644E+00			

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
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Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Nitrogen Oxides							
	EU 122	PER 007		8.371E+00	3.666E+01	0.000E+00	
	EU 123	PER 006		1.240E+01			
	EU 123	PER 007		9.300E+00	4.073E+01		
	EU 124	PER 007		6.200E+00	2.716E+01		
	EU 126	PER 007		8.300E-01	3.630E+00		
	EU 127	PER 007		7.100E-01	3.110E+00		
	EU 128	PER 007		3.600E-01	1.560E+00		
	EU 129	PER 007		1.180E+00	6.730E-02		
	FC 000	PER 006					3.350E+00
	FC 000	PER 007					0.000E+00
	GP 020	PER 007				7.300E+01	
	SV 008	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 012	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 025	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 026	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 035	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 041	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					1.837E+02	7.300E+01	0.000E+00
PM < 2.5 micron							
	EU 003	PER 007		4.100E-01	1.210E+01		
	EU 029	PER 007		7.350E-01	4.599E+01		
	EU 054	PER 007		2.922E+00	1.728E+02	4.800E-02	
	EU 055	PER 007		2.200E-01	3.810E+00		
	EU 057	PER 007		4.700E-01	6.430E+00		
	EU 059	PER 007		1.147E+00	1.962E+01		
	EU 060	PER 007		1.210E-01	2.060E+00		
	EU 063	PER 007		1.910E-01	1.194E+01		
	EU 065	PER 007		1.910E-01	1.194E+01		
	EU 066	PER 007		1.155E+00	1.976E+01		
	EU 068	PER 007		1.210E-01	2.060E+00		
	EU 069	PER 007		1.210E-01	2.060E+00		
	EU 070	PER 007		1.210E-01	2.060E+00		
	EU 094	PER 007		4.820E-01	2.110E+00	0.000E+00	
	EU 095	PER 007		1.910E-01	7.963E+01		
	EU 096	PER 007		1.470E-01	7.250E+00		

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

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Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
PM < 2.5 micron							
	EU 097	PER 007		1.910E-01	1.194E+01		
	EU 103	PER 007		1.600E-01	4.780E+00		
	EU 110	PER 007		5.000E-02	2.300E-01		
	EU 111	PER 007		5.000E-02	2.300E-01		
	EU 112	PER 007		5.000E-02	2.000E-01		
	EU 113	PER 007		5.000E-02	2.000E-01		
	EU 114	PER 007		5.000E-02	2.000E-01		
	EU 115	PER 007		8.000E-02	3.500E-01		
	EU 116	PER 007		7.000E-02	3.200E-01		
	EU 117	PER 007		7.000E-02	3.200E-01	0.000E+00	
	EU 118	PER 007		7.400E-01	1.007E+01		
	EU 119	PER 007		1.500E-01	2.010E+00		
	EU 120	PER 007		8.700E-01	1.489E+01		
	EU 121	PER 007		4.743E-01	2.053E+01	2.080E+00	
	EU 122	PER 007		2.000E-02	9.000E-02		
	EU 123	PER 007		6.600E-01	2.890E+00		
	EU 124	PER 007		4.400E-01	1.930E+00		
	EU 125	PER 007		7.000E-02	2.130E+00		
	EU 126	PER 007		4.000E-02	2.000E-01		
	EU 127	PER 007		4.000E-02	1.700E-01		
	EU 128	PER 007		2.000E-02	8.000E-02		
	EU 129	PER 007		1.000E-03	1.650E-04		
	FS 001	PER 007		3.000E-02	9.400E-01	2.000E-02	
	FS 002	PER 007		4.000E-02	3.000E-02	3.000E-02	
	GP 018	PER 007				7.150E+01	
Totals					4.763E+02	7.368E+01	0.000E+00
Lead							
	EU 060	PER 007		9.900E-03	4.320E-02	4.320E-02	
	EU 066	PER 007		2.300E-01	1.007E+00	1.007E+00	
	EU 068	PER 007		9.900E-03	4.320E-02	4.320E-02	
	EU 069	PER 007		9.900E-03	4.320E-02	4.320E-02	
	EU 070	PER 007		9.900E-03	4.320E-02	4.320E-02	
	EU 096	PER 007			9.740E-06	9.740E-06	
	EU 110	PER 007		3.330E-06	1.460E-05	1.460E-05	
	EU 111	PER 007		3.330E-06	1.460E-05	1.460E-05	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Lead							
	EU 112	PER 007		2.860E-06	1.250E-05	1.250E-05	
	EU 113	PER 007		2.860E-06	1.250E-05	1.250E-05	
	EU 114	PER 007		2.860E-06	1.250E-05	1.250E-05	
	EU 115	PER 007		4.980E-06	2.180E-05	2.180E-05	
	EU 116	PER 007			1.970E-05	1.970E-05	
	EU 117	PER 007		4.500E-06	1.970E-05	1.970E-05	
	EU 126	PER 007		2.780E-06	1.220E-05	1.220E-05	
	EU 127	PER 007		2.380E-06	1.040E-05	1.040E-05	
	EU 128	PER 007		1.190E-06	5.210E-06	5.210E-06	
Totals					1.180E+00	1.180E+00	0.000E+00
PM < 10 micron							
	EU 002	PER 006		8.000E-02			
	EU 002	PER 007		0.000E+00	0.000E+00		
	EU 003	PER 006		2.210E-01	0.000E+00	0.000E+00	
	EU 003	PER 007		4.100E-01	1.210E+01	0.000E+00	
	EU 005	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 010	PER 006		4.800E-02			
	EU 010	PER 007		0.000E+00			
	EU 029	PER 006		1.100E-01			
	EU 029	PER 007		7.350E-01	4.599E+01		
	EU 037	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 054	PER 006		6.120E-01			
	EU 054	PER 007		2.922E+00	1.728E+02	4.800E-02	
	EU 055	PER 006		1.940E-01			
	EU 055	PER 007		2.200E-01	3.810E+00		
	EU 056	PER 006		4.500E-04			
	EU 056	PER 007		0.000E+00			
	EU 057	PER 006		3.800E-01			
	EU 057	PER 007		4.700E-01	6.430E+00		
	EU 058	PER 006		1.700E-04			
	EU 058	PER 007		0.000E+00			
	EU 059	PER 006		3.100E-01			
	EU 059	PER 007		1.147E+00	1.962E+01		
	EU 060	PER 006		9.800E-02			
	EU 060	PER 007		1.210E-01	2.060E+00		

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
PM < 10 micron							
	EU 061	PER 006		1.700E-04			
	EU 061	PER 007		0.000E+00			
	EU 063	PER 006		2.725E-02			
	EU 063	PER 007		1.910E-01	1.194E+01		
	EU 064	PER 006		5.800E-04			
	EU 064	PER 007		0.000E+00			
	EU 065	PER 006		3.100E-01			
	EU 065	PER 007		1.910E-01	1.194E+01		
	EU 066	PER 006		9.380E-01			
	EU 066	PER 007		1.155E+00	1.976E+01		
	EU 068	PER 006		9.800E-02			
	EU 068	PER 007		1.210E-01	2.060E+00		
	EU 069	PER 006		9.800E-02			
	EU 069	PER 007		1.210E-01	2.060E+00		
	EU 070	PER 006		9.800E-02			
	EU 070	PER 007		1.210E-01	2.060E+00		
	EU 088	PER 006		4.500E-04			
	EU 088	PER 007		0.000E+00			
	EU 089	PER 006		4.500E-04			
	EU 089	PER 007		0.000E+00			
	EU 090	PER 006		4.500E-04			
	EU 090	PER 007		0.000E+00			
	EU 091	PER 006		4.500E-04			
	EU 091	PER 007		0.000E+00			
	EU 092	PER 006		4.500E-04			
	EU 092	PER 007		0.000E+00			
	EU 094	PER 006		4.820E-01			
	EU 094	PER 007		4.820E-01	2.110E+00		
	EU 095	PER 006		3.100E-01			
	EU 095	PER 007		1.910E-01	1.194E+01		
	EU 096	PER 006		5.000E-02			
	EU 096	PER 007		1.470E-01	7.250E+00		
	EU 097	PER 006		2.725E-02			
	EU 097	PER 007		1.910E-01	1.194E+01		
	EU 099	PER 006		5.800E-04			

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
PM < 10 micron							
	EU 099	PER 007		0.000E+00			
	EU 100	PER 006		5.800E-04			
	EU 100	PER 007		0.000E+00			
	EU 101	PER 006		5.800E-04			
	EU 101	PER 007		0.000E+00			
	EU 102	PER 006		5.800E-04			
	EU 102	PER 007		0.000E+00			
	EU 103	PER 006		8.700E-02			
	EU 103	PER 007		1.600E-01	4.780E+00		
	EU 104	PER 006		4.500E-04			
	EU 104	PER 007		0.000E+00			
	EU 105	PER 006		4.500E-04			
	EU 105	PER 007		0.000E+00			
	EU 106	PER 006		4.500E-04			
	EU 106	PER 007		0.000E+00			
	EU 107	PER 006		4.500E-04			
	EU 107	PER 007		0.000E+00			
	EU 108	PER 006		4.500E-04			
	EU 108	PER 007		0.000E+00			
	EU 109	PER 006		4.500E-04			
	EU 109	PER 007		0.000E+00			
	EU 110	PER 006		5.070E-02			
	EU 110	PER 007		5.000E-02	2.300E-01		
	EU 111	PER 006		5.070E-02			
	EU 111	PER 007		5.070E-02	2.300E-01		
	EU 112	PER 006		4.340E-02			
	EU 112	PER 007		5.000E-02	2.000E-01		
	EU 113	PER 006		4.340E-02			
	EU 113	PER 007		5.000E-02	2.000E-01		
	EU 114	PER 006		4.340E-02			
	EU 114	PER 007		5.000E-02	2.000E-01		
	EU 115	PER 006		7.560E-02			
	EU 115	PER 007		7.560E-02	3.500E-01		
	EU 116	PER 006		6.840E-02			
	EU 116	PER 007		7.000E-02	3.200E-01		

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
PM < 10 micron							
	EU 117	PER 006		6.840E-02			
	EU 117	PER 007		7.000E-02	3.200E-01		
	EU 118	PER 006		7.200E-01			
	EU 118	PER 007		7.400E-01	1.007E+01		
	EU 119	PER 006		1.200E-01			
	EU 119	PER 007		1.500E-01	2.010E+00		
	EU 120	PER 006		2.530E-02			
	EU 120	PER 007		8.700E-01	1.489E+01		
	EU 121	PER 006		2.520E-01			
	EU 121	PER 007		4.743E-01	2.053E+01	2.080E+00	
	EU 122	PER 006		1.950E-02			
	EU 122	PER 007		1.950E-02	9.000E-02		
	EU 123	PER 006		8.800E-01			
	EU 123	PER 007		6.600E-01	2.890E+00		
	EU 124	PER 007		4.400E-01	1.930E+00		
	EU 125	PER 007		7.000E-02	2.130E+00		
	EU 126	PER 007		4.000E-02	2.000E-01		
	EU 127	PER 007		4.000E-02	1.700E-01	0.000E+00	
	EU 128	PER 007		2.000E-02	8.000E-02		
	EU 129	PER 007		1.000E-03	1.650E-04		
	FC 000	PER 006					4.000E+00
	FC 000	PER 007					0.000E+00
	FS 001	PER 007		1.400E-01	9.400E-01	1.100E-01	
	FS 002	PER 007		3.600E-01	2.700E-01	2.700E-01	
	GP 018	PER 007				7.150E+01	
	SV 002	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 005	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 006	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 007	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 008	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 011	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 012	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 025	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 026	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 027	PER 006		0.000E+00	0.000E+00	0.000E+00	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
PM < 10 micron							
	SV 028	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 029	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 030	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 031	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 032	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 033	PER 006		0.000E+00	0.000E+00	0.000E+00	0.000E+00
	SV 034	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 035	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 036	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 037	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 038	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 039	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 040	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 041	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 042	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					4.089E+02	7.401E+01	0.000E+00
Polycyclic organic matter							
	EU 094	PER 007		1.350E-04	5.900E-04	5.900E-04	
	EU 096	PER 006		3.840E-07			
	EU 096	PER 007		3.920E-07	1.720E-06	1.720E-06	
	EU 110	PER 006		5.760E-07			
	EU 110	PER 007		5.880E-07	2.580E-06	2.580E-06	
	EU 111	PER 006		5.760E-07			
	EU 111	PER 007		5.880E-07	2.580E-06	2.580E-06	
	EU 112	PER 006		4.940E-07			
	EU 112	PER 007		5.040E-07	2.210E-06	2.210E-06	
	EU 113	PER 006		4.940E-07			
	EU 113	PER 007		5.040E-07	2.210E-06	2.210E-06	
	EU 114	PER 006		4.940E-07			
	EU 114	PER 007		5.040E-07	2.210E-06	2.210E-06	
	EU 115	PER 006		8.600E-07			
	EU 115	PER 007		8.780E-07	3.840E-06	3.840E-06	
	EU 116	PER 006		7.780E-07			
	EU 116	PER 007		7.940E-07	3.480E-06	3.480E-06	
	EU 117	PER 006		7.780E-07			

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Polycyclic organic matter							
	EU 117	PER 007		7.940E-07	3.480E-06	3.480E-06	
	EU 122	PER 007		2.890E-04	1.270E-03	1.270E-03	
	EU 123	PER 007		2.610E-04	1.140E-03	1.140E-03	
	EU 124	PER 007		7.670E-07	3.360E-06	3.360E-06	
	EU 126	PER 007		4.900E-07	2.150E-06	2.150E-06	
	EU 127	PER 007		4.200E-07	1.840E-06	1.840E-06	
	EU 128	PER 007		2.100E-07	9.200E-07	9.200E-07	
	EU 129	PER 007		3.230E-08	1.410E-07	1.410E-07	
	FC 000	PER 006					2.380E-05
	FC 000	PER 007					0.000E+00
Totals					3.033E-03	3.033E-03	0.000E+00
Total Particulate Matter							
	EU 002	PER 006		8.000E-02			
	EU 002	PER 007		0.000E+00			
	EU 003	PER 006		2.210E-01	0.000E+00	0.000E+00	
	EU 003	PER 007		4.100E-01	1.210E+01	0.000E+00	
	EU 005	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 010	PER 006		3.080E-01			
	EU 010	PER 007		0.000E+00			
	EU 029	PER 006		1.980E+00			
	EU 029	PER 007		1.980E+00	8.672E+02		
	EU 037	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 054	PER 006		2.950E+00			
	EU 054	PER 007		2.646E+00	1.084E+03	3.870E-01	
	EU 055	PER 006		1.940E-01			
	EU 055	PER 007		2.600E-01	5.490E+00		
	EU 056	PER 006		1.125E-03			
	EU 056	PER 007		0.000E+00			
	EU 057	PER 006		3.800E-01			
	EU 057	PER 007		4.700E-01	6.430E+00		
	EU 058	PER 006		1.700E-04			
	EU 058	PER 007		0.000E+00			
	EU 059	PER 006		4.440E-01			
	EU 059	PER 007		1.331E+00	2.803E+01		
	EU 060	PER 006		1.025E-01			

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Total Particulate Matter							
	EU 060	PER 007		1.030E-01	2.160E+00		
	EU 061	PER 006		1.700E-04			
	EU 061	PER 007		0.000E+00			
	EU 063	PER 006		1.816E-01			
	EU 063	PER 007		1.820E-01	7.963E+01		
	EU 064	PER 006		5.800E-04			
	EU 064	PER 007		0.000E+00			
	EU 065	PER 006		4.440E-01			
	EU 065	PER 007		1.820E-01	7.963E+01		
	EU 066	PER 006		1.914E+00			
	EU 066	PER 007		1.914E+00	4.030E+01		
	EU 068	PER 006		1.025E-01			
	EU 068	PER 007		1.030E-01	2.160E+00		
	EU 069	PER 006		1.025E-01			
	EU 069	PER 007		1.030E-01	2.160E+00		
	EU 070	PER 006		1.025E-01			
	EU 070	PER 007		1.030E-01	2.160E+00		
	EU 088	PER 006		1.125E-03			
	EU 088	PER 007		0.000E+00			
	EU 089	PER 006		1.125E-03			
	EU 089	PER 007		0.000E+00			
	EU 090	PER 006		1.125E-03			
	EU 090	PER 007		0.000E+00			
	EU 091	PER 006		1.125E-03			
	EU 091	PER 007		0.000E+00			
	EU 092	PER 006		1.125E-03			
	EU 092	PER 007		0.000E+00			
	EU 094	PER 006		4.820E-01			
	EU 094	PER 007		4.820E-01	2.110E+00		
	EU 095	PER 006		4.440E-01			
	EU 095	PER 007		1.820E-01	7.963E+01		
	EU 096	PER 006		5.000E-02			
	EU 096	PER 007		1.420E-01	4.746E+01		
	EU 097	PER 006		1.816E-01			
	EU 097	PER 007		1.820E-01	7.963E+01		

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Total Particulate Matter							
	EU 099	PER 006		5.800E-04			
	EU 099	PER 007		0.000E+00			
	EU 100	PER 006		5.800E-04			
	EU 100	PER 007		0.000E+00			
	EU 101	PER 006		5.800E-04			
	EU 101	PER 007		0.000E+00			
	EU 102	PER 006		5.800E-04			
	EU 102	PER 007		0.000E+00			
	EU 103	PER 006		8.700E-02			
	EU 103	PER 007		1.600E-01	4.780E+00		
	EU 104	PER 006		1.125E-03			
	EU 104	PER 007		0.000E+00			
	EU 105	PER 006		1.125E-03			
	EU 105	PER 007		0.000E+00			
	EU 106	PER 006		1.125E-03			
	EU 106	PER 007		0.000E+00			
	EU 107	PER 006		1.125E-03			
	EU 107	PER 007		0.000E+00			
	EU 108	PER 006		1.125E-03			
	EU 108	PER 007		0.000E+00	0.000E+00		
	EU 109	PER 006		1.125E-03			
	EU 109	PER 007		0.000E+00			
	EU 110	PER 006		5.070E-02			
	EU 110	PER 007		5.000E-02	2.300E-01		
	EU 111	PER 006		5.070E-02			
	EU 111	PER 007		5.070E-02	2.300E-01		
	EU 112	PER 006		4.340E-02			
	EU 112	PER 007		5.000E-02	2.000E-01		
	EU 113	PER 006		4.340E-02			
	EU 113	PER 007		5.000E-02	2.000E-01		
	EU 114	PER 006		4.340E-02			
	EU 114	PER 007		5.000E-02	2.000E-01		
	EU 115	PER 006		7.560E-02			
	EU 115	PER 007		7.560E-02	3.500E-01		
	EU 116	PER 006		6.840E-02			

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Total Particulate Matter							
	EU 116	PER 007		7.000E-02	3.200E-01		
	EU 117	PER 006		6.840E-02			
	EU 117	PER 007		7.000E-02	3.200E-01		
	EU 118	PER 006		7.200E-01			
	EU 118	PER 007		7.400E-01	1.007E+01		
	EU 119	PER 006		1.200E-01			
	EU 119	PER 007		1.500E-01	2.010E+00		
	EU 120	PER 006		2.530E-01			
	EU 120	PER 007		7.072E+01	1.489E+02		
	EU 121	PER 006		1.310E+00			
	EU 121	PER 007		1.440E+00	1.442E+02	6.310E+00	
	EU 122	PER 006		1.950E-02			
	EU 122	PER 007		1.950E-02	9.000E-02		
	EU 123	PER 006		8.800E-01			
	EU 123	PER 007		6.600E-01	2.890E+00		
	EU 124	PER 007		4.400E-01	1.930E+00		
	EU 125	PER 007		7.000E-02	2.130E+00		
	EU 126	PER 007		4.000E-02	2.000E-01		
	EU 127	PER 007		4.000E-02	1.700E-01		
	EU 128	PER 007		2.000E-02	8.000E-02		
	EU 129	PER 007		1.000E-03	1.650E-04		
	FC 000	PER 006					4.470E+00
	FC 000	PER 007					0.000E+00
	FS 001	PER 007		3.600E-01	2.560E+00	2.800E-01	
	FS 002	PER 007		3.040E+00	2.330E+00	2.330E+00	
	GP 018	PER 007				7.150E+01	
	SV 002	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 005	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 006	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 007	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 008	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 011	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 012	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 025	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 026	PER 006		0.000E+00	0.000E+00	0.000E+00	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Total Particulate Matter							
	SV 027	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 028	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 029	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 030	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 031	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 032	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 033	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 034	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 035	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 036	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 037	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 038	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 039	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 040	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 041	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 042	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					2.745E+03	8.081E+01	0.000E+00
Antimony compounds							
	EU 066	PER 007		1.840E-02	8.060E-02	8.060E-02	
Totals					8.060E-02	8.060E-02	0.000E+00
Selenium compounds							
	EU 096	PER 006		1.070E-06			
	EU 096	PER 007		1.070E-06	4.680E-07	4.680E-07	
	EU 110	PER 006		1.600E-06			
	EU 110	PER 007		1.600E-07	7.010E-07	7.010E-07	
	EU 111	PER 006		1.600E-06			
	EU 111	PER 007		1.600E-07	7.010E-07	7.010E-07	
	EU 112	PER 006		1.370E-06			
	EU 112	PER 007		1.370E-06	6.010E-07	6.010E-07	
	EU 113	PER 006		1.370E-06			
	EU 113	PER 007		1.370E-06	6.010E-07	6.010E-07	
	EU 114	PER 006		1.370E-06			
	EU 114	PER 007		1.370E-06	6.010E-07	6.010E-07	
	EU 115	PER 006		2.390E-06			
	EU 115	PER 007		2.390E-06	1.050E-06	1.050E-06	

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Selenium compounds							
	EU 116	PER 006		2.160E-06			
	EU 116	PER 007		2.160E-06	9.460E-07	9.460E-07	
	EU 117	PER 006		2.160E-06			
	EU 117	PER 007		2.160E-06	9.460E-07	9.460E-07	
	EU 126	PER 007		1.330E-07	5.840E-07	5.840E-07	
	EU 127	PER 007		1.140E-07	5.010E-07	5.010E-07	
	EU 128	PER 007		5.710E-08	2.500E-07	2.500E-07	
	FC 000	PER 006					6.610E-05
	FC 000	PER 007					0.000E+00
Totals					7.950E-06	7.950E-06	0.000E+00
HAP-Single							
	GP 002	PER 006				0.000E+00	
	SV 042	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					0.000E+00	0.000E+00	0.000E+00
Sulfur Dioxide							
	EU 037	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 066	PER 006		4.000E-02			
	EU 066	PER 007		0.000E+00			
	EU 094	PER 006		4.490E-01			
	EU 094	PER 007		1.620E-01	7.100E-01	7.100E-01	
	EU 096	PER 006		5.100E-03			
	EU 096	PER 007		5.100E-03	1.000E-02	1.000E-02	
	EU 110	PER 006		7.700E-03			
	EU 110	PER 007		7.700E-03	2.000E-02	2.000E-02	
	EU 111	PER 006		7.700E-03			
	EU 111	PER 007		7.700E-03	2.000E-02	2.000E-02	
	EU 112	PER 006		6.600E-03			
	EU 112	PER 007		6.600E-03	2.000E-02	2.000E-02	
	EU 113	PER 006		6.600E-02			
	EU 113	PER 007		6.600E-02	2.000E-02	2.000E-02	
	EU 114	PER 006		6.600E-03			
	EU 114	PER 007		6.600E-03	2.000E-02	2.000E-02	
	EU 115	PER 006		1.140E-02			
	EU 115	PER 007		1.140E-02	3.000E-02	3.000E-02	
	EU 116	PER 006		1.030E-02			

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Sulfur Dioxide							
	EU 116	PER 007		1.030E-02	2.000E-02	2.000E-02	
	EU 117	PER 006		1.030E-02			
	EU 117	PER 007		1.030E-02	2.000E-02	2.000E-02	
	EU 122	PER 006		2.200E-03			
	EU 122	PER 007		1.000E-03	1.000E-02	1.000E-02	
	EU 123	PER 006		8.200E-01			
	EU 123	PER 007		2.210E-01	9.700E-01	9.700E-01	
	EU 124	PER 007		1.480E-01	6.500E-01	6.500E-01	
	EU 126	PER 007		5.000E-03	1.000E-02	1.000E-02	
	EU 127	PER 007		5.000E-03	1.000E-02	1.000E-02	
	EU 128	PER 007		5.000E-04	1.000E-02	1.000E-02	
	EU 129	PER 007		1.000E-03	9.700E-06	9.700E-06	
	FC 000	PER 006					4.000E-02
	FC 000	PER 007					0.000E+00
	SV 008	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 012	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 025	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 026	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 032	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 035	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 036	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 041	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					2.550E+00	2.550E+00	0.000E+00
Volatile Organic Compounds							
	EU 001	PER 006		4.090E+00			
	EU 001	PER 007		0.000E+00			
	EU 002	PER 006		2.770E+00			
	EU 002	PER 007		0.000E+00			
	EU 003	PER 006		1.480E+01	0.000E+00	0.000E+00	
	EU 003	PER 007		3.950E+00	1.729E+01	0.000E+00	
	EU 037	PER 006		0.000E+00	0.000E+00	0.000E+00	
	EU 057	PER 006		1.045E+01			
	EU 057	PER 007		1.045E+01	4.577E+01		
	EU 063	PER 006		1.370E+00			
	EU 063	PER 007		9.000E-02	3.800E-01		

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Volatile Organic Compounds							
	EU 066	PER 006		2.800E-01			
	EU 066	PER 007		0.000E+00			
	EU 094	PER 006		5.510E-01			
	EU 094	PER 007		5.510E-01	2.370E+00	0.000E+00	
	EU 096	PER 006		2.500E-02			
	EU 096	PER 007		5.000E-02	2.200E-01		
	EU 097	PER 006		1.370E+00			
	EU 097	PER 007		9.000E-02	3.800E-01		
	EU 103	PER 006		4.950E+00			
	EU 103	PER 007		4.950E+00	2.169E+01		
	EU 110	PER 006		3.830E-02			
	EU 110	PER 007		8.000E-02	3.400E-01		
	EU 111	PER 006		3.830E-02			
	EU 111	PER 007		8.000E-02	3.400E-01		
	EU 112	PER 006		3.280E-02			
	EU 112	PER 007		7.000E-02	2.900E-01		
	EU 113	PER 006		3.280E-02			
	EU 113	PER 007		7.000E-02	2.900E-01		
	EU 114	PER 006		3.280E-02			
	EU 114	PER 007		7.000E-02	2.900E-01		
	EU 115	PER 006		5.710E-02			
	EU 115	PER 007		1.100E-01	5.000E-01		
	EU 116	PER 006		5.170E-02			
	EU 116	PER 007		1.000E-01	4.500E-01		
	EU 117	PER 006		5.170E-02			
	EU 117	PER 007		1.000E-01	4.500E-01		
	EU 118	PER 006		4.188E+01			
	EU 118	PER 007		3.490E+01	1.529E+02		
	EU 119	PER 006		6.980E+00			
	EU 119	PER 007		6.980E+00	3.057E+01		
	EU 122	PER 006		1.602E-01			
	EU 122	PER 007		2.420E-01	1.060E+00		
	EU 123	PER 006		1.006E+00			
	EU 123	PER 007		7.410E-01	3.250E+00		
	EU 124	PER 007		4.940E-01	2.160E+00		

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Volatile Organic Compounds							
	EU 125	PER 007		2.850E+00	1.246E+01		
	EU 126	PER 007		6.000E-02	2.800E-01		
	EU 127	PER 007		5.000E-02	2.400E-01		
	EU 128	PER 007		3.000E-02	1.200E-01		
	EU 129	PER 007		8.000E-03	1.950E-03		
	FC 000	PER 006					1.899E+01
	FC 000	PER 007					0.000E+00
	GP 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
	GP 017	PER 006		0.000E+00	0.000E+00	0.000E+00	
	GP 019	PER 007				8.500E+01	
	SV 001	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 002	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 008	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 012	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 025	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 026	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 035	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 041	PER 006		0.000E+00	0.000E+00	0.000E+00	
	SV 042	PER 006		0.000E+00	0.000E+00	0.000E+00	
Totals					2.941E+02	8.500E+01	0.000E+00

Combustion Sources

Unit	EU110, EU111		Shot Saw Heaters	
Maximum Capacity	**7**	**MMBtu/hr**		
Fuel	Natural gas			
HHV	1050	Btu/cf		
Fuel Consumption Rate	0.006666667	MMcf/hr		

Pollutant	Emission Factor (lb/MMcf)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	7.6	0.051	0.22	0.22
PM10/PM2.5	7.6	0.051	0.22	0.22
SO2	0.6	0.004	0.02	0.02
NOx	100	0.667	2.92	2.92
VOC	5.5	0.037	0.16	0.16
CO	84	0.560	2.45	2.45
CO2	1.20E+05	800.000	3504.00	3504.00
CH4	2.30E+00	0.015	0.07	0.07
N2O	2.20E+00	0.015	0.06	0.06
CO2e			3.53E+03	3.53E+03
Pb	0.0005	0.000	1.46E-05	1.46E-05

Emission Factors from AP-42, Chapter 1.4, "Natural Gas Combustion", Table 1.4-1 and 1.4-2, 7/98

Fuel	Propane	
HHV	91.5	MMBtu/Mgal
Fuel Consumption Rate	0.076502732	Mgal/hr

Pollutant	Emission Factor (lb/Mgal)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	0.7	0.054	0.23	0.23
PM10/PM2.5	0.7	0.054	0.23	0.23
SO2	0.02	0.002	0.01	0.01
NOx	13	0.995	4.36	4.36
VOC	1	0.077	0.34	0.34
CO	7.5	0.574	2.51	2.51
CO2	12500	956.284	4188.52	4188.52
CH4	0.2	0.015	0.07	0.07
N2O	0.9	0.069	0.30	0.30
CO2e			4.28E+03	4.28E+03
Pb		0.000	0.00E+00	0.00E+00

Pollutant	Emission Rate (lb/hr)	Limited Controlled Emissions (ton/yr)
PM	0.05	0.23
PM10/PM2.5	0.05	0.23
SO2	0.00	0.02
NOx	0.99	4.36
VOC	0.08	0.34
CO	0.57	2.51
CO2	956.28	4188.52
CH4	0.02	0.07
N2O	0.07	0.30
CO2e	977.95	4283.42
Pb	0.00	1.46E-05

Emission factors from AP-42, Chapter 1.5, "Liquefied Petroleum Gas Combustion", Table 1.5-1, 10/96).

Unit	EU112, EU113, EU114		Monuwest Heaters	
Maximum Capacity	**6**	**MMBtu/hr**		
Fuel	Natural gas			
HHV	1050	Btu/cf		
Fuel Consumption Rate	0.005714286	MMcf/hr		

Pollutant	Emission Factor (lb/MMcf)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	7.6	0.043	0.19	0.19
PM10/PM2.5	7.6	0.043	0.19	0.19
SO2	0.6	0.003	0.02	0.02
NOx	100	0.571	2.50	2.50
VOC	5.5	0.031	0.14	0.14
CO2	1.20E+05	685.714	3003.43	3003.43
CH4	2.30E+00	0.013	0.06	0.06
N2O	2.20E+00	0.013	0.06	0.06
CO2e			3.02E+03	3.02E+03
CO	84	0.480	2.10	2.10
Pb	0.0005	0.000	1.25E-05	1.25E-05

Emission Factors from AP-42, Chapter 1.4, "Natural Gas Combustion", Table 1.4-1 and 1.4-2, 7/98

Fuel	Propane	
HHV	91.5	MMBtu/Mgal
Fuel Consumption Rate	0.06557377	Mgal/hr

Pollutant	Emission Factor (lb/Mgal)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	0.7	0.046	0.20	0.20
PM10/PM2.5	0.7	0.046	0.20	0.20
SO2	0.02	0.001	0.01	0.01
NOx	13	0.852	3.73	3.73
VOC	1	0.066	0.29	0.29
CO	7.5	0.492	2.15	2.15
CO2	12500	819.672	3590.16	3590.16
CH4	0.2	0.013	0.06	0.06
N2O	0.9	0.059	0.26	0.26
CO2e			3.67E+03	3.67E+03
Pb		0.000	0.00E+00	0.00E+00

Pollutant	Emission Rate (lb/hr)	Limited Controlled Emissions (ton/yr)
PM	0.05	0.20
PM10/PM2.5	0.05	0.20
SO2	0.00	0.02
NOx	0.85	3.73
VOC	0.07	0.29
CO	0.49	2.15
CO2	819.67	3590.16
CH4	0.01	0.06
N2O	0.06	0.26
CO2e	838.24	3671.50
Pb	0.00	1.25E-05

Emission factors from AP-42, Chapter 1.5, "Liquefied Petroleum Gas Combustion", Table 1.5-1, 10/96).

Unit	**EU 115**		**Foundry Heater**	
Maximum Capacity	**10.45**	**MMBtu/hr**		
Fuel	Natural gas			
HHV	1050	Btu/cf		
Fuel Consumption Rate	0.009952381	MMcf/hr		

Pollutant	Emission Factor (lb/MMcf)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	7.6	0.076	0.33	0.33
PM10/PM2.5	7.6	0.076	0.33	0.33
SO2	0.6	0.006	0.03	0.03
NOx	100	0.995	4.36	4.36
VOC	5.5	0.055	0.24	0.24
CO2	1.20E+05	1194.286	5230.97	5230.97
CH4	2.30E+00	0.023	0.10	0.10
N2O	2.20E+00	0.022	0.10	0.10
CO2e			5.26E+03	5.26E+03
CO	84	0.836	3.66	3.66
Pb	0.0005	0.000	2.18E-05	2.18E-05

Emission Factors from AP-42, Chapter 1.4, "Natural Gas Combustion", Table 1.4-1 and 1.4-2, 7/98

Fuel	Propane	
HHV	91.5	MMBtu/Mgal
Fuel Consumption Rate	0.11420765	Mgal/hr

Pollutant	Emission Factor (lb/Mgal)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	0.7	0.080	0.35	0.35
PM10/PM2.5	0.7	0.080	0.35	0.35
SO2	0.02	0.002	0.01	0.01
NOx	13	1.485	6.50	6.50
VOC	1	0.114	0.50	0.50
CO	7.5	0.857	3.75	3.75
CO2	12500	1427.596	6252.87	6252.87
CH4	0.2	0.023	0.10	0.10
N2O	0.9	0.103	0.45	0.45
CO2e			6.39E+03	6.39E+03
Pb		0.000	0.00E+00	0.00E+00

Pollutant	Emission Rate (lb/hr)	Limited Controlled Emissions (ton/yr)
PM	0.08	0.35
PM10/PM2.5	0.08	0.35
SO2	0.01	0.03
NOx	1.48	6.50
VOC	0.11	0.50
CO	0.86	3.75
CO2	1427.60	6252.87
CH4	0.02	0.10
N2O	0.10	0.45
CO2e	1459.94	6394.53
Pb	0.00	2.18E-05

Emission factors from AP-42, Chapter 1.5, "Liquefied Petroleum Gas Combustion", Table 1.5-1, 10/96).

Unit	**EU116, EU117**		**Foundry Heater**	
Maximum Capacity	**9.45**	**MMBtu/hr**		
Fuel	Natural gas			
HHV	1050	Btu/cf		
Fuel Consumption Rate	0.009	MMcf/hr		

Pollutant	Emission Factor (lb/MMcf)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	7.6	0.068	0.30	0.30
PM10/PM2.5	7.6	0.068	0.30	0.30
SO2	0.6	0.005	0.02	0.02
NOx	100	0.900	3.94	3.94
VOC	5.5	0.050	0.22	0.22
CO2	1.20E+05	1080.000	4730.40	4730.40
CH4	2.30E+00	0.021	0.09	0.09
N2O	2.20E+00	0.020	0.09	0.09
CO2e			4.76E+03	4.76E+03
CO	84	0.756	3.31	3.31
Pb	0.0005	0.000	1.97E-05	1.97E-05

Emission Factors from AP-42, Chapter 1.4, "Natural Gas Combustion", Table 1.4-1 and 1.4-2, 7/98

Fuel	Propane	
HHV	91.5	MMBtu/Mgal
Fuel Consumption Rate	0.103278689	Mgal/hr

Pollutant	Emission Factor (lb/Mgal)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	0.7	0.072	0.32	0.32
PM10/PM2.5	0.7	0.072	0.32	0.32
SO2	0.02	0.002	0.01	0.01
NOx	13	1.343	5.88	5.88
VOC	1	0.103	0.45	0.45
CO	7.5	0.775	3.39	3.39
CO2	12500	1290.984	5654.51	5654.51
CH4	0.2	0.021	0.09	0.09
N2O	0.9	0.093	0.41	0.41
CO2e			5.78E+03	5.78E+03
Pb		0.000	0.00E+00	0.00E+00

Pollutant	Emission Rate (lb/hr)	Limited Controlled Emissions (ton/yr)
PM	0.07	0.32
PM10/PM2.5	0.07	0.32
SO2	0.01	0.02
NOx	1.34	5.88
VOC	0.10	0.45
CO	0.77	3.39
CO2	1290.98	5654.51
CH4	0.02	0.09
N2O	0.09	0.41
CO2e	1320.23	5782.62
Pb	0.00	1.97E-05

Emission factors from AP-42, Chapter 1.5, "Liquefied Petroleum Gas Combustion", Table 1.5-1, 10/96.

Unit	EU094		Monuwest Generator		
Maximum Capacity	**219**	**Hp**			
	0.557	MMBtu/hr			
Fuel	Diesel				
Pollutant	Emission Factor (lb/hp-hr)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)		
PM	0.0022	0.482	2.11		
$PM_{10}/PM_{2.5}$	0.0022	0.482	2.11		
SO_2 (factor in lb/MMBtu)	0.29	0.162	0.71	0.29 lb/MMBtu	0.58
NOx	0.031	6.789	29.74		
VOC	0.00247	0.541	2.37		
CO	0.00668	1.463	6.41		
CO_2	1.15E+00	251.850	1103.10		
CH_4	0.00E+00	0.000	0.00E+00		
N_2O	0.00E+00	0.000	0.00E+00		
CO_2e			1.10E+03		

Emission factors are from manufacturer's information, except SO2, which is from AP-42, Section 3.3, "Gasoline and Diesel Industrial Engines", Table 3.3-1, 10/96

Unit	EU122		Generator		
Maximum Capacity	**150**	**kW**			
	2.05	**MMBtu/hr**			
Fuel	Propane				
Pollutant	Emission Factor (lb/MMBtu)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)		
PM	0.0100	0.020	0.09		
PM10/PM2.5	0.0100	0.020	0.09		
SO_2	0.00059	0.001	0.01	0.00059 lb/MMBtu	0.12%
NOx	4.08	8.371	36.66		
VOC	0.1180	0.242	1.06		
CO	0.32	0.650	2.85		
CO2	1.10E+02	225.687	988.51		
CH4	1.25E+00	2.565	11.23		
N2O	0.00E+00	0.000	0.00		
CO2e			1.22E+03		

Emission factors are from AP-42, Section 3.2, "Natural Gas-Fired Reciprocating Engines", Table 3.2-3, 07/00.

Unit	EU123		Monuwest Diesel Generator		
Maximum Capacity	**300**	**Hp**			
	0.763	**MMBtu/hr**			
Fuel	Diesel				
Pollutant	Emission Factor (lb/hp-hr)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)		
PM	0.0022	0.660	2.89		
$PM_{10}/PM_{2.5}$	0.0022	0.660	2.89		
SO_2 (factor in lb/MMBtu)	0.29	0.221	0.97	0.29 lb/MMBtu	
NOx	0.031	9.300	40.73		
VOC	0.00247	0.741	3.25		
CO	0.00668	2.004	8.78		
CO_2	1.15E+00	345.000	1511.10		
CH_4	0.00E+00	0.000	0.00		
N_2O	0.00E+00	0.000	0.00		
CO_2e			1.51E+03		

Emission factors are from AP-42, Section 3.3, "Gasoline and Diesel Industrial Engines", Table 3.3-1, 10/96.

Unit	EU124		Water Plant Generator		
Maximum Capacity	**200**	**Hp**			
	0.51	MMBtu/hr			
Fuel	Diesel				
Pollutant	Emission Factor (lb/hp-hr)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)		
PM	0.0022	0.440	1.93		
$PM_{10}/PM_{2.5}$	0.0022	0.440	1.93		
SO_2 (factor in lb/MMBtu)	0.29	0.148	0.65	0.29 lb/MMBtu	
NOx	0.031	6.200	27.16		
VOC	0.00247	0.494	2.16		
CO	0.00668	1.336	5.85		
CO_2	1.15E+00	230.000	1007.40		
CH_4	0.00E+00	0.000	0.00		
N_2O	0.00E+00	0.000	0.00		
CO_2e			1.01E+03		

Emission factors are from AP-42, Section 3.3, "Gasoline and Diesel Industrial Engines", Table 3.3-1, 10/96

Unit	EU096B		Foundry Thermal Reclaim	
Maximum Capacity	**4.67**	**MMBtu/hr**		
Fuel	Natural gas			
HHV	1050	Btu/cf		
Fuel Consumption Rate	0.004447619	MMcf/hr		

Pollutant	Emission Factor (lb/MMcf)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	7.6	0.034	0.15	0.15
PM10/PM2.5	7.6	0.034	0.15	0.15
SO2	0.6	0.003	0.01	0.01
NOx	100	0.445	1.95	1.95
VOC	5.5	0.024	0.11	0.11
CO2	1.20E+05	533.714	2337.67	2337.67
CH4	2.30E+00	0.010	0.04	0.04
N2O	2.20E+00	0.010	0.04	0.04
CO2e			2.35E+03	2.35E+03
CO	84	0.374	1.64	1.64
Pb	0.0005	0.000	9.74E-06	9.74E-06

Emission Factors from AP-42, Chapter 1.4, "Natural Gas Combustion", Table 1.4-1 and 1.4-2, 7/98

Fuel	Propane	
HHV	91.5	MMBtu/Mgal
Fuel Consumption Rate	0.051038251	Mgal/hr

Pollutant	Emission Factor (lb/Mgal)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	0.7	0.036	0.16	0.16
PM10/PM2.5	0.7	0.036	0.16	0.16
SO2	0.02	0.001	0.00	0.00
NOx	13	0.663	2.91	2.91
VOC	1	0.051	0.22	0.22
CO	7.5	0.383	1.68	1.68
CO2	12500	637.978	2794.34	2794.34
CH4	0.2	0.010	0.04	0.04
N2O	0.9	0.046	0.20	0.20
CO2e			2.86E+03	2.86E+03
Pb		0.000	0.00E+00	0.00E+00

Emission factors from AP-42, Chapter 1.5, "Liquefied Petroleum Gas Combustion", Table 1.5-1, 10/96.

Pollutant	Emission Rate (lb/hr)	Limited Controlled Emissions (ton/yr)
PM	0.04	0.16
PM10/PM2.5	0.04	0.16
SO2	0.00	0.01
NOx	0.66	2.91
VOC	0.05	0.22
CO	0.38	1.68
CO2	637.98	2794.34
CH4	0.01	0.04
N2O	0.05	0.20
CO2e	652.43	2857.65
Pb	0.00	9.74E-06

Unit	IA Heaters		Total of 157 Units	
Maximum Capacity	**27.12**	**MMBtu/hr**		
Fuel	Natural gas			
HHV	1050	Btu/cf		
Fuel Consumption Rate	0.025828571	MMcf/hr		

Pollutant	Emission Factor (lb/MMcf)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	7.6	0.196	0.86	0.86
PM10/PM2.5	7.6	0.196	0.86	0.86
SO2	0.6	0.015	0.07	0.07
NOx	100	2.583	11.31	11.31
VOC	5.5	0.142	0.62	0.62
CO2	1.20E+05	3099.429	13575.50	13575.50
CH4	2.30E+00	0.059	0.26	0.26
N2O	2.20E+00	0.057	0.25	0.25
CO2e			1.36E+04	1.36E+04
CO	84	2.170	9.50	9.50
Pb	0.0005	0.000	5.66E-05	5.66E-05

Emission Factors from AP-42, Chapter 1.4, "Natural Gas Combustion", Table 1.4-1 and 1.4-2, 7/98

Fuel	Propane	
HHV	91.5	MMBtu/Mgal
Fuel Consumption Rate	0.296393443	Mgal/hr

Pollutant	Emission Factor (lb/Mgal)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	0.7	0.207	0.91	0.91
PM10/PM2.5	0.7	0.207	0.91	0.91
SO2	0.02	0.006	0.03	0.03
NOx	13	3.853	16.88	16.88
VOC	1	0.296	1.30	1.30
CO	7.5	2.223	9.74	9.74
CO2	12500	3704.918	16227.54	16227.54
CH4	0.2	0.059	0.26	0.26
N2O	0.9	0.267	1.17	1.17
CO2e			1.66E+04	1.66E+04
Pb		0.000	0.00E+00	0.00E+00

Emission factors from AP-42, Chapter 1.5, "Liquefied Petroleum Gas Combustion", Table 1.5-1, 10/96.

Pollutant	Emission Rate (lb/hr)	Limited Controlled Emissions (ton/yr)
PM	0.21	0.91
PM10/PM2.5	0.21	0.91
SO2	0.02	0.07
NOx	3.85	16.88
VOC	0.30	1.30
CO	2.22	9.74
CO2	3704.92	16227.54
CH4	0.06	0.26
N2O	0.27	1.17
CO2e	3788.86	16595.19
Pb	0.00	5.66E-05

GHG Summary

Emission Unit	CO2 (tpy)	CH4 (tpy)	NO2 (tpy)
EU110	4,189	0.0	0.0
EU111	4,189	0.0	0.0
EU112	3,590	0.0	0.0
EU113	3,590	0.0	0.0
EU114	3,590	0.0	0.0
EU115	6,253	0.0	0.0
EU116	5,655	0.0	0.0
EU117	5,655	0.0	0.0
EU094	0	0.0	0.0
EU122	0	0.0	0.0
EU123	0	0.0	0.0
EU124	0	0.0	0.0
EU096A	2,794	0.0	0.0
IA Heaters	16,228	0.0	0.0
Total	**55,731**	**0.0**	**0.0**

Unit	**EU129**		**IA58 Foundry Emergency Ge**		
Maximum Capacity	**0.07**	**MMBtu/hr**			
Fuel	Propane				
Pollutant	Emission Factor (lb/MMBtu)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)	
PM	0.0100	0.001	0.00	1.65E-04	
PM10/PM2.5	0.0100	0.001	0.00	1.65E-04	
SO_2	0.00059	0.000	0.00	9.70E-06	0.06% lb/MMBtu
NOx	4.08	0.269	1.18	6.73E-02	
VOC	0.1180	0.008	0.03	1.95E-03	
CO	0.32	0.021	0.09	5.23E-03	
CO2	1.10E+02	7.260	31.80	1.82	
CH4	1.25E+00	0.083	0.36	2.06E-02	
N2O	0.00E+00	0.000	0.00	0.00E+00	
CO2e			3.94E+01	2.25E+00	
Emission factors are from AP-42, Section 3.2, "Natural Gas-Fired Reciprocating Engines", Table 3.2-3, 07/0(					

Unit	**EU126**		**Hastings Space Heater**		
Maximum Capacity	**5.832**	**MMBtu/hr**			
Fuel	Natural gas				
HHV	1050	Btu/cf			
Fuel Consumption Rate	0.005554286	MMcf/hr			
Pollutant	Emission Factor (lb/MMcf)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)	
PM	7.6	0.042	0.18	0.18	
PM10/PM2.5	7.6	0.042	0.18	0.18	
SO2	0.6	0.003	0.01	0.01	
NOx	100	0.555	2.43	2.43	
VOC	5.5	0.031	0.13	0.13	
CO2	1.20E+05	666.514	2919.33	2919.33	
CH4	2.30E+00	0.013	0.06	0.06	
N2O	2.20E+00	0.012	0.05	0.05	
CO2e			2.94E+03	2.94E+03	
CO	84	0.467	2.04	2.04	
Pb	0.0005	0.000	1.22E-05	1.22E-05	
Emission Factors from AP-42, Chapter 1.4, "Natural Gas Combustion", Table 1.4-1 and 1.4-2, 7/98					
Fuel	Propane				
HHV	91.5	MMBtu/Mgal			
Fuel Consumption Rate	0.063737705	Mgal/hr			
Pollutant	Emission Factor (lb/Mgal)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)	
PM	0.7	0.045	0.20	0.20	
PM10/PM2.5	0.7	0.045	0.20	0.20	
SO2	0.02	0.001	0.01	0.01	
NOx	13	0.829	3.63	3.63	
VOC	1	0.064	0.28	0.28	
CO	7.5	0.478	2.09	2.09	
CO2	12500	796.721	3489.64	3489.64	
CH4	0.2	0.013	0.06	0.06	
N2O	0.9	0.057	0.25	0.25	
CO2e			3.57E+03	3.57E+03	
Pb		0.000	0.00E+00	0.00E+00	
Emission factors from AP-42, Chapter 1.5, "Liquefied Petroleum Gas Combustion", Table 1.5-1, 10/96.					

Pollutant	Emission Rate (lb/hr)	Limited Controlled Emissions (ton/yr)
PM	0.04	0.20
PM10/PM2.5	0.04	0.20
SO2	0.00	0.01
NOx	0.83	3.63
VOC	0.06	0.28
CO	0.48	2.09
CO2	796.72	3489.64
CH4	0.01	0.06
N2O	0.06	0.25
CO2e	814.77	3568.70
Pb	0.00	1.22E-05

Unit	**EU127**		**Weather Rite space heater**	
Maximum Capacity	**5**	**MMBtu/hr**		
Fuel	Natural gas			
HHV	1050	Btu/cf		
Fuel Consumption Rate	0.004761905	MMcf/hr		

Pollutant	Emission Factor (lb/MMcf)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	7.6	0.036	0.16	0.16
PM10/PM2.5	7.6	0.036	0.16	0.16
SO2	0.6	0.003	0.01	0.01
NOx	100	0.476	2.09	2.09
VOC	5.5	0.026	0.11	0.11
CO2	1.20E+05	571.429	2502.86	2502.86
CH4	2.30E+00	0.011	0.05	0.05
N2O	2.20E+00	0.010	0.05	0.05
CO2e			2.52E+03	2.52E+03
CO	84	0.400	1.75	1.75
Pb	0.0005	0.000	1.04E-05	1.04E-05

Emission Factors from AP-42, Chapter 1.4, "Natural Gas Combustion", Table 1.4-1 and 1.4-2, 7/98

Fuel	Propane	
HHV	91.5	MMBtu/Mgal
Fuel Consumption Rate	0.054644809	Mgal/hr

Pollutant	Emission Factor (lb/Mgal)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	0.7	0.038	0.17	0.17
PM10/PM2.5	0.7	0.038	0.17	0.17
SO2	0.02	0.001	0.00	0.00
NOx	13	0.710	3.11	3.11
VOC	1	0.055	0.24	0.24
CO	7.5	0.410	1.80	1.80
CO2	12500	683.060	2991.80	2991.80
CH4	0.2	0.011	0.05	0.05
N2O	0.9	0.049	0.22	0.22
CO2e			3.06E+03	3.06E+03
Pb		0.000	0.00E+00	0.00E+00

Pollutant	Emission Rate (lb/hr)	Limited Controlled Emissions (ton/yr)
PM	0.04	0.17
PM10/PM2.5	0.04	0.17
SO2	0.00	0.01
NOx	0.71	3.11
VOC	0.05	0.24
CO	0.41	1.80
CO2	683.06	2991.80
CH4	0.01	0.05
N2O	0.05	0.22
CO2e	698.54	3059.59
Pb	0.00	1.04E-05

Emission factors from AP-42, Chapter 1.5, "Liquefied Petroleum Gas Combustion", Table 1.5-1, 10/96.

Unit	**EU128**		**Paint Curing oven**	
Maximum Capacity	**2.5**	**MMBtu/hr**		
Fuel	Natural gas			
HHV	1050	Btu/cf		
Fuel Consumption Rate	0.002380952	MMcf/hr		

Pollutant	Emission Factor (lb/MMcf)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	7.6	0.018	0.08	0.08
PM10/PM2.5	7.6	0.018	0.08	0.08
SO2	0.6	0.001	0.01	0.01
NOx	100	0.238	1.04	1.04
VOC	5.5	0.013	0.06	0.06
CO2	1.20E+05	285.714	1251.43	1251.43
CH4	2.30E+00	0.005	0.02	0.02
N2O	2.20E+00	0.005	0.02	0.02
CO2e			1.26E+03	1.26E+03
CO	84	0.200	0.88	0.88
Pb	0.0005	0.000	5.21E-06	5.21E-06

Emission Factors from AP-42, Chapter 1.4, "Natural Gas Combustion", Table 1.4-1 and 1.4-2, 7/98

Fuel	Propane	
HHV	91.5	MMBtu/Mgal
Fuel Consumption Rate	0.027322404	Mgal/hr

Pollutant	Emission Factor (lb/Mgal)	Emission Rate (lb/hr)	Maximum Uncontrolled Emissions (ton/yr)	Limited Controlled Emissions (ton/yr)
PM	0.7	0.019	0.08	0.08
PM10/PM2.5	0.7	0.019	0.08	0.08
SO2	0.02	0.001	0.00	0.00
NOx	13	0.355	1.56	1.56
VOC	1	0.027	0.12	0.12
CO	7.5	0.205	0.90	0.90
CO2	12500	341.530	1495.90	1495.90
CH4	0.2	0.005	0.02	0.02
N2O	0.9	0.025	0.11	0.11
CO2e			1.53E+03	1.53E+03
Pb		0.000	0.00E+00	0.00E+00

Pollutant	Emission Rate (lb/hr)	Limited Controlled Emissions (ton/yr)
PM	0.02	0.08
PM10/PM2.5	0.02	0.08
SO2	0.00	0.01
NOx	0.36	1.56
VOC	0.03	0.12
CO	0.20	0.90
CO2	341.53	1495.90
CH4	0.01	0.02
N2O	0.02	0.11
CO2e	349.27	1529.79
Pb	0.00	5.21E-06

Emission factors from AP-42, Chapter 1.5, "Liquefied Petroleum Gas Combustion", Table 1.5-1, 10/96.

Project: **CSG - GW**

Subject: Potential Natural Gas Combustion Emission Calculation[1]

Heater Description: EU 110, EU111 - Shot Saw Heater

Burner Capacity	7.00	MMBtu/hr
Heat Content	1,050	Btu/CF
Maximum Firing Rate	6,667	CF/Hr
Maximum Annual Fuel use	58	MM CF/yr
Maximum Operating Hours	8,760	hr/yr

HAP?	Pollutant	CAS No.	Em. Factor (lb/10^6 SCF)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Arsenic	7440-38-2	2.00E-04	**1.33E-06**	**5.84E-06**
	Barium	7440-39-3	4.40E-03	**2.93E-05**	**1.28E-04**
HAP	Beryllium	7440-41-7	1.20E-05	**8.00E-08**	**3.50E-07**
HAP	Cadmium	7440-43-9	1.10E-03	**7.33E-06**	**3.21E-05**
HAP	Chromium	7440-47-3	1.40E-03	**9.33E-06**	**4.09E-05**
HAP	Cobalt	7440-48-4	8.40E-05	**5.60E-07**	**2.45E-06**
	Copper	7440-50-8	8.50E-04	**5.67E-06**	**2.48E-05**
HAP	Manganese	7439-96-5	3.80E-04	**2.53E-06**	**1.11E-05**
HAP	Lead		5.00E-04	**3.33E-06**	**1.46E-05**
HAP	Mercury	7439-97-6	2.60E-04	**1.73E-06**	**7.59E-06**
	Molybdenum	7439-98-7	1.10E-03	**7.33E-06**	**3.21E-05**
HAP	NIckel	7440-02-0	2.10E-03	**1.40E-05**	**6.13E-05**
HAP	Selenium	7782-49-2	2.40E-05	**1.60E-07**	**7.01E-07**
	Vanadium	7440-62-2	2.30E-03	**1.53E-05**	**6.72E-05**
	Zinc	7440-66-6	2.90E-02	**1.93E-04**	**8.47E-04**
HAP	Benzene	71-43-2	2.10E-03	**1.40E-05**	**6.13E-05**
	Butane	106-97-8	2.1	**1.40E-02**	**6.13E-02**
HAP	Dichlorobenzene	25321-22-6	1.20E-03	**8.00E-06**	**3.50E-05**
	Ethane	74-84-0	3.1	**2.07E-02**	**9.05E-02**
HAP	Formaldehyde	50-00-0	7.50E-02	**5.00E-04**	**2.19E-03**
HAP	Hexane	110-54-3	1.8	**1.20E-02**	**5.26E-02**
HAP	Naphthalene	91-20-3	6.10E-04	**4.07E-06**	**1.78E-05**
	Pentane	109-66-0	2.6	**1.73E-02**	**7.59E-02**
	Propane	74-98-6	1.6	**1.07E-02**	**4.67E-02**
HAP	Toluene	108-88-3	3.40E-03	**2.27E-05**	**9.93E-05**
HAP, POM	2-Methylnaphthalene	91-57-6	2.40E-05	**1.60E-07**	**7.01E-07**
HAP, POM	3-Methylchloroanthrene	56-49-5	1.80E-06	**1.20E-08**	**5.26E-08**
HAP, POM	7,12-Dimethylbenz(a)anthracene		1.60E-05	**1.07E-07**	**4.67E-07**
HAP, POM	Acenaphthene	83-32-9	1.80E-06	**1.20E-08**	**5.26E-08**
HAP, POM	Acenaphthylene	203-96-8	1.80E-06	**1.20E-08**	**5.26E-08**
HAP, POM	Anthracene	120-12-7	2.40E-06	**1.60E-08**	**7.01E-08**
HAP, POM	Benz(a)anthracene	56-55-3	1.80E-06	**1.20E-08**	**5.26E-08**
HAP, POM	Benzo(a)pyrene	50-32-8	1.20E-06	**8.00E-09**	**3.50E-08**
HAP, POM	Benzo(b)fluoranthene	205-99-2	1.80E-06	**1.20E-08**	**5.26E-08**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	1.20E-06	**8.00E-09**	**3.50E-08**
HAP, POM	Benzo(k)fluoranthene	205-82-3	1.80E-06	**1.20E-08**	**5.26E-08**
HAP, POM	Chrysene	218-01-9	1.80E-06	**1.20E-08**	**5.26E-08**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	1.20E-06	**8.00E-09**	**3.50E-08**
HAP, POM	Fluoranthene	206-44-0	3.00E-06	**2.00E-08**	**8.76E-08**
HAP, POM	Fluorene	86-73-7	2.80E-06	**1.87E-08**	**8.18E-08**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-06	**1.20E-08**	**5.26E-08**
HAP, POM	Phenanthrene	85-01-8	1.70E-05	**1.13E-07**	**4.96E-07**
HAP, POM	Pyrene	129-00-0	5.00E-06	**3.33E-08**	**1.46E-07**
HAP, POM	Total POM		8.82E-05	**5.88E-07**	**2.58E-06**
	Total HAPs			**1.26E-02**	**5.51E-02**

[1] Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, 5th Edition, Tables 1.4-1, -2, -3 & -4, 7/

Potential Emissions = (Emis. factor, lb/10^6 scf) x (CF/hr) / 10^6 = lb/hr (lb/hr) x 8760 hr/yr / 2000 lb/ton = ton/yr

Project: **CSG - GW**

Subject: Potential Natural Gas Combustion Emission Calculations [1]

Heater Description: EU 112, EU113, EU114 - Monuwest Heaters

Burner Capacity	6.00	MMBtu/hr
Heat Content	1,050	Btu/CF
Maximum Firing Rate	5,714	CF/Hr
Maximum Annual Fuel use	50	MM CF/yr
Maximum Operating Hours	8,760	hr/yr

HAP?	Pollutant	CAS No.	Em. Factor (lb/10^6 SCF)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Arsenic	7440-38-2	2.00E-04	**1.14E-06**	**5.01E-06**
	Barium	7440-39-3	4.40E-03	**2.51E-05**	**1.10E-04**
HAP	Beryllium	7440-41-7	1.20E-05	**6.86E-08**	**3.00E-07**
HAP	Cadmium	7440-43-9	1.10E-03	**6.29E-06**	**2.75E-05**
HAP	Chromium	7440-47-3	1.40E-03	**8.00E-06**	**3.50E-05**
HAP	Cobalt	7440-48-4	8.40E-05	**4.80E-07**	**2.10E-06**
	Copper	7440-50-8	8.50E-04	**4.86E-06**	**2.13E-05**
HAP	Manganese	7439-96-5	3.80E-04	**2.17E-06**	**9.51E-06**
HAP	Lead		5.00E-04	**2.86E-06**	**1.25E-05**
HAP	Mercury	7439-97-6	2.60E-04	**1.49E-06**	**6.51E-06**
	Molybdenum	7439-98-7	1.10E-03	**6.29E-06**	**2.75E-05**
HAP	NIckel	7440-02-0	2.10E-03	**1.20E-05**	**5.26E-05**
HAP	Selenium	7782-49-2	2.40E-05	**1.37E-07**	**6.01E-07**
	Vanadium	7440-62-2	2.30E-03	**1.31E-05**	**5.76E-05**
	Zinc	7440-66-6	2.90E-02	**1.66E-04**	**7.26E-04**
HAP	Benzene	71-43-2	2.10E-03	**1.20E-05**	**5.26E-05**
	Butane	106-97-8	2.1	**1.20E-02**	**5.26E-02**
HAP	Dichlorobenzene	25321-22-6	1.20E-03	**6.86E-06**	**3.00E-05**
	Ethane	74-84-0	3.1	**1.77E-02**	**7.76E-02**
HAP	Formaldehyde	50-00-0	7.50E-02	**4.29E-04**	**1.88E-03**
HAP	Hexane	110-54-3	1.8	**1.03E-02**	**4.51E-02**
HAP	Naphthalene	91-20-3	6.10E-04	**3.49E-06**	**1.53E-05**
	Pentane	109-66-0	2.6	**1.49E-02**	**6.51E-02**
	Propane	74-98-6	1.6	**9.14E-03**	**4.00E-02**
HAP	Toluene	108-88-3	3.40E-03	**1.94E-05**	**8.51E-05**
HAP, POM	2-Methylnaphthalene	91-57-6	2.40E-05	**1.37E-07**	**6.01E-07**
HAP, POM	3-Methylchloroanthrene	56-49-5	1.80E-06	**1.03E-08**	**4.51E-08**
HAP, POM	7,12-Dimethylbenz(a)anthracene		1.60E-05	**9.14E-08**	**4.00E-07**
HAP, POM	Acenaphthene	83-32-9	1.80E-06	**1.03E-08**	**4.51E-08**
HAP, POM	Acenaphthylene	203-96-8	1.80E-06	**1.03E-08**	**4.51E-08**
HAP, POM	Anthracene	120-12-7	2.40E-06	**1.37E-08**	**6.01E-08**
HAP, POM	Benz(a)anthracene	56-55-3	1.80E-06	**1.03E-08**	**4.51E-08**
HAP, POM	Benzo(a)pyrene	50-32-8	1.20E-06	**6.86E-09**	**3.00E-08**
HAP, POM	Benzo(b)fluoranthene	205-99-2	1.80E-06	**1.03E-08**	**4.51E-08**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	1.20E-06	**6.86E-09**	**3.00E-08**
HAP, POM	Benzo(k)fluoranthene	205-82-3	1.80E-06	**1.03E-08**	**4.51E-08**
HAP, POM	Chrysene	218-01-9	1.80E-06	**1.03E-08**	**4.51E-08**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	1.20E-06	**6.86E-09**	**3.00E-08**
HAP, POM	Fluoranthene	206-44-0	3.00E-06	**1.71E-08**	**7.51E-08**
HAP, POM	Fluorene	86-73-7	2.80E-06	**1.60E-08**	**7.01E-08**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-06	**1.03E-08**	**4.51E-08**
HAP, POM	Phenanthrene	85-01-8	1.70E-05	**9.71E-08**	**4.25E-07**
HAP, POM	Pyrene	129-00-0	5.00E-06	**2.86E-08**	**1.25E-07**
HAP, POM	Total POM		8.82E-05	**5.04E-07**	**2.21E-06**
	Total HAPs			**1.08E-02**	**4.73E-02**

[1] Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, 5th Edition, Tables 1.4-1, -2, -3 & -4, 7/98

Potential Emissions = (Emis. factor, lb/10^6 scf) x (CF/hr) / 10^6 = lb/hr (lb/hr) x 8760 hr/yr / 2000 lb/ton = ton/yr

Project: **CSG - GW**

Subject: Potential Natural Gas Combustion Emission Calculation[1]

Heater Description: EU115 - Foudnry Heater

Burner Capacity	10.45	MMBtu/hr
Heat Content	1,050	Btu/CF
Maximum Firing Rate	9,952	CF/Hr
Maximum Annual Fuel use	87	MM CF/yr
Maximum Operating Hours	8,760	hr/yr

HAP?	Pollutant	CAS No.	Em. Factor (lb/10^6 SCF)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Arsenic	7440-38-2	2.00E-04	**1.99E-06**	**8.72E-06**
	Barium	7440-39-3	4.40E-03	**4.38E-05**	**1.92E-04**
HAP	Beryllium	7440-41-7	1.20E-05	**1.19E-07**	**5.23E-07**
HAP	Cadmium	7440-43-9	1.10E-03	**1.09E-05**	**4.80E-05**
HAP	Chromium	7440-47-3	1.40E-03	**1.39E-05**	**6.10E-05**
HAP	Cobalt	7440-48-4	8.40E-05	**8.36E-07**	**3.66E-06**
	Copper	7440-50-8	8.50E-04	**8.46E-06**	**3.71E-05**
HAP	Manganese	7439-96-5	3.80E-04	**3.78E-06**	**1.66E-05**
HAP	Lead		5.00E-04	**4.98E-06**	**2.18E-05**
HAP	Mercury	7439-97-6	2.60E-04	**2.59E-06**	**1.13E-05**
	Molybdenum	7439-98-7	1.10E-03	**1.09E-05**	**4.80E-05**
HAP	Nickel	7440-02-0	2.10E-03	**2.09E-05**	**9.15E-05**
HAP	Selenium	7782-49-2	2.40E-05	**2.39E-07**	**1.05E-06**
	Vanadium	7440-62-2	2.30E-03	**2.29E-05**	**1.00E-04**
	Zinc	7440-66-6	2.90E-02	**2.89E-04**	**1.26E-03**
HAP	Benzene	71-43-2	2.10E-03	**2.09E-05**	**9.15E-05**
	Butane	106-97-8	2.1	**2.09E-02**	**9.15E-02**
HAP	Dichlorobenzene	25321-22-6	1.20E-03	**1.19E-05**	**5.23E-05**
	Ethane	74-84-0	3.1	**3.09E-02**	**1.35E-01**
HAP	Formaldehyde	50-00-0	7.50E-02	**7.46E-04**	**3.27E-03**
HAP	Hexane	110-54-3	1.8	**1.79E-02**	**7.85E-02**
HAP	Naphthalene	91-20-3	6.10E-04	**6.07E-06**	**2.66E-05**
	Pentane	109-66-0	2.6	**2.59E-02**	**1.13E-01**
	Propane	74-98-6	1.6	**1.59E-02**	**6.97E-02**
HAP	Toluene	108-88-3	3.40E-03	**3.38E-05**	**1.48E-04**
HAP, POM	2-Methylnaphthalene	91-57-6	2.40E-05	**2.39E-07**	**1.05E-06**
HAP, POM	3-Methylchloroanthrene	56-49-5	1.80E-06	**1.79E-08**	**7.85E-08**
HAP, POM	7,12-Dimethylbenz(a)anthracene		1.60E-05	**1.59E-07**	**6.97E-07**
HAP, POM	Acenaphthene	83-32-9	1.80E-06	**1.79E-08**	**7.85E-08**
HAP, POM	Acenaphthylene	203-96-8	1.80E-06	**1.79E-08**	**7.85E-08**
HAP, POM	Anthracene	120-12-7	2.40E-06	**2.39E-08**	**1.05E-07**
HAP, POM	Benz(a)anthracene	56-55-3	1.80E-06	**1.79E-08**	**7.85E-08**
HAP, POM	Benzo(a)pyrene	50-32-8	1.20E-06	**1.19E-08**	**5.23E-08**
HAP, POM	Benzo(b)fluoranthene	205-99-2	1.80E-06	**1.79E-08**	**7.85E-08**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	1.20E-06	**1.19E-08**	**5.23E-08**
HAP, POM	Benzo(k)fluoranthene	205-82-3	1.80E-06	**1.79E-08**	**7.85E-08**
HAP, POM	Chrysene	218-01-9	1.80E-06	**1.79E-08**	**7.85E-08**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	1.20E-06	**1.19E-08**	**5.23E-08**
HAP, POM	Fluoranthene	206-44-0	3.00E-06	**2.99E-08**	**1.31E-07**
HAP, POM	Fluorene	86-73-7	2.80E-06	**2.79E-08**	**1.22E-07**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-06	**1.79E-08**	**7.85E-08**
HAP, POM	Phenanthrene	85-01-8	1.70E-05	**1.69E-07**	**7.41E-07**
HAP, POM	Pyrene	129-00-0	5.00E-06	**4.98E-08**	**2.18E-07**
HAP, POM	Total POM		8.82E-05	**8.78E-07**	**3.84E-06**
	Total HAPs			**1.88E-02**	**8.23E-02**

[1] Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, 5th Edition, Tables 1.4-1, -2, -3 & -4, 7/

Potential Emissions = (Emis. factor, lb/10^6 scf) x (CF/hr) / 10^6 = lb/hr (lb/hr) x 8760 hr/yr / 2000 lb/ton = ton/yr

Project: **CSG - GW**

Subject: Potential Natural Gas Combustion Emission Calculation[1]

Boiler Description: EU 116, EU117 Foundry Heater NG

Burner Capacity	9.45	MMBtu/hr
Heat Content	1,050	Btu/CF
Maximum Firing Rate	9,000	CF/Hr
Maximum Annual Fuel use	79	MM CF/yr
Maximum Operating Hours	8,760	hr/yr

HAP?	Pollutant	CAS No.	Em. Factor (lb/10^6 SCF)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Arsenic	7440-38-2	2.00E-04	**1.80E-06**	**7.88E-06**
	Barium	7440-39-3	4.40E-03	**3.96E-05**	**1.73E-04**
HAP	Beryllium	7440-41-7	1.20E-05	**1.08E-07**	**4.73E-07**
HAP	Cadmium	7440-43-9	1.10E-03	**9.90E-06**	**4.34E-05**
HAP	Chromium	7440-47-3	1.40E-03	**1.26E-05**	**5.52E-05**
HAP	Cobalt	7440-48-4	8.40E-05	**7.56E-07**	**3.31E-06**
	Copper	7440-50-8	8.50E-04	**7.65E-06**	**3.35E-05**
HAP	Manganese	7439-96-5	3.80E-04	**3.42E-06**	**1.50E-05**
HAP	Lead		5.00E-04	**4.50E-06**	**1.97E-05**
HAP	Mercury	7439-97-6	2.60E-04	**2.34E-06**	**1.02E-05**
	Molybdenum	7439-98-7	1.10E-03	**9.90E-06**	**4.34E-05**
HAP	NIckel	7440-02-0	2.10E-03	**1.89E-05**	**8.28E-05**
HAP	Selenium	7782-49-2	2.40E-05	**2.16E-07**	**9.46E-07**
	Vanadium	7440-62-2	2.30E-03	**2.07E-05**	**9.07E-05**
	Zinc	7440-66-6	2.90E-02	**2.61E-04**	**1.14E-03**
HAP	Benzene	71-43-2	2.10E-03	**1.89E-05**	**8.28E-05**
	Butane	106-97-8	2.1	**1.89E-02**	**8.28E-02**
HAP	Dichlorobenzene	25321-22-6	1.20E-03	**1.08E-05**	**4.73E-05**
	Ethane	74-84-0	3.1	**2.79E-02**	**1.22E-01**
HAP	Formaldehyde	50-00-0	7.50E-02	**6.75E-04**	**2.96E-03**
HAP	Hexane	110-54-3	1.8	**1.62E-02**	**7.10E-02**
HAP	Naphthalene	91-20-3	6.10E-04	**5.49E-06**	**2.40E-05**
	Pentane	109-66-0	2.6	**2.34E-02**	**1.02E-01**
	Propane	74-98-6	1.6	**1.44E-02**	**6.31E-02**
HAP	Toluene	108-88-3	3.40E-03	**3.06E-05**	**1.34E-04**
HAP, POM	2-Methylnaphthalene	91-57-6	2.40E-05	**2.16E-07**	**9.46E-07**
HAP, POM	3-Methylchloroanthrene	56-49-5	1.80E-06	**1.62E-08**	**7.10E-08**
HAP, POM	7,12-Dimethylbenz(a)anthracene		1.60E-05	**1.44E-07**	**6.31E-07**
HAP, POM	Acenaphthene	83-32-9	1.80E-06	**1.62E-08**	**7.10E-08**
HAP, POM	Acenaphthylene	203-96-8	1.80E-06	**1.62E-08**	**7.10E-08**
HAP, POM	Anthracene	120-12-7	2.40E-06	**2.16E-08**	**9.46E-08**
HAP, POM	Benz(a)anthracene	56-55-3	1.80E-06	**1.62E-08**	**7.10E-08**
HAP, POM	Benzo(a)pyrene	50-32-8	1.20E-06	**1.08E-08**	**4.73E-08**
HAP, POM	Benzo(b)fluoranthene	205-99-2	1.80E-06	**1.62E-08**	**7.10E-08**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	1.20E-06	**1.08E-08**	**4.73E-08**
HAP, POM	Benzo(k)fluoranthene	205-82-3	1.80E-06	**1.62E-08**	**7.10E-08**
HAP, POM	Chrysene	218-01-9	1.80E-06	**1.62E-08**	**7.10E-08**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	1.20E-06	**1.08E-08**	**4.73E-08**
HAP, POM	Fluoranthene	206-44-0	3.00E-06	**2.70E-08**	**1.18E-07**
HAP, POM	Fluorene	86-73-7	2.80E-06	**2.52E-08**	**1.10E-07**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-06	**1.62E-08**	**7.10E-08**
HAP, POM	Phenanthrene	85-01-8	1.70E-05	**1.53E-07**	**6.70E-07**
HAP, POM	Pyrene	129-00-0	5.00E-06	**4.50E-08**	**1.97E-07**
HAP, POM	Total POM		8.82E-05	**7.94E-07**	**3.48E-06**
	Total HAPs			**1.70E-02**	**7.44E-02**

[1] Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, 5th Edition, Tables 1.4-1, -2, -3 & -4, 7/

Potential Emissions = (Emis. factor, lb/10^6 scf) x (CF/hr) / 10^6 = lb/hr (lb/hr) x 8760 hr/yr / 2000 lb/ton = ton/yr

Project: **CSG - GW**

Subject: Potential Natural Gas Combustion Emission Calculation[1]

Boiler Description: EU126 Space Heater NG

Burner Capacity	5.83	MMBtu/hr
Heat Content	1,050	Btu/CF
Maximum Firing Rate	5,554	CF/Hr
Maximum Annual Fuel use	49	MM CF/yr
Maximum Operating Hours	8,760	hr/yr

HAP?	Pollutant	CAS No.	Em. Factor (lb/10^6 SCF)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Arsenic	7440-38-2	2.00E-04	**1.11E-06**	**4.87E-06**
	Barium	7440-39-3	4.40E-03	**2.44E-05**	**1.07E-04**
HAP	Beryllium	7440-41-7	1.20E-05	**6.67E-08**	**2.92E-07**
HAP	Cadmium	7440-43-9	1.10E-03	**6.11E-06**	**2.68E-05**
HAP	Chromium	7440-47-3	1.40E-03	**7.78E-06**	**3.41E-05**
HAP	Cobalt	7440-48-4	8.40E-05	**4.67E-07**	**2.04E-06**
	Copper	7440-50-8	8.50E-04	**4.72E-06**	**2.07E-05**
HAP	Manganese	7439-96-5	3.80E-04	**2.11E-06**	**9.24E-06**
HAP	Lead		5.00E-04	**2.78E-06**	**1.22E-05**
HAP	Mercury	7439-97-6	2.60E-04	**1.44E-06**	**6.33E-06**
	Molybdenum	7439-98-7	1.10E-03	**6.11E-06**	**2.68E-05**
HAP	NIckel	7440-02-0	2.10E-03	**1.17E-05**	**5.11E-05**
HAP	Selenium	7782-49-2	2.40E-05	**1.33E-07**	**5.84E-07**
	Vanadium	7440-62-2	2.30E-03	**1.28E-05**	**5.60E-05**
	Zinc	7440-66-6	2.90E-02	**1.61E-04**	**7.06E-04**
HAP	Benzene	71-43-2	2.10E-03	**1.17E-05**	**5.11E-05**
	Butane	106-97-8	2.1	**1.17E-02**	**5.11E-02**
HAP	Dichlorobenzene	25321-22-6	1.20E-03	**6.67E-06**	**2.92E-05**
	Ethane	74-84-0	3.1	**1.72E-02**	**7.54E-02**
HAP	Formaldehyde	50-00-0	7.50E-02	**4.17E-04**	**1.82E-03**
HAP	Hexane	110-54-3	1.8	**1.00E-02**	**4.38E-02**
HAP	Naphthalene	91-20-3	6.10E-04	**3.39E-06**	**1.48E-05**
	Pentane	109-66-0	2.6	**1.44E-02**	**6.33E-02**
	Propane	74-98-6	1.6	**8.89E-03**	**3.89E-02**
HAP	Toluene	108-88-3	3.40E-03	**1.89E-05**	**8.27E-05**
HAP, POM	2-Methylnaphthalene	91-57-6	2.40E-05	**1.33E-07**	**5.84E-07**
HAP, POM	3-Methylchloroanthrene	56-49-5	1.80E-06	**1.00E-08**	**4.38E-08**
HAP, POM	7,12-Dimethylbenz(a)anthracene		1.60E-05	**8.89E-08**	**3.89E-07**
HAP, POM	Acenaphthene	83-32-9	1.80E-06	**1.00E-08**	**4.38E-08**
HAP, POM	Acenaphthylene	203-96-8	1.80E-06	**1.00E-08**	**4.38E-08**
HAP, POM	Anthracene	120-12-7	2.40E-06	**1.33E-08**	**5.84E-08**
HAP, POM	Benz(a)anthracene	56-55-3	1.80E-06	**1.00E-08**	**4.38E-08**
HAP, POM	Benzo(a)pyrene	50-32-8	1.20E-06	**6.67E-09**	**2.92E-08**
HAP, POM	Benzo(b)fluoranthene	205-99-2	1.80E-06	**1.00E-08**	**4.38E-08**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	1.20E-06	**6.67E-09**	**2.92E-08**
HAP, POM	Benzo(k)fluoranthene	205-82-3	1.80E-06	**1.00E-08**	**4.38E-08**
HAP, POM	Chrysene	218-01-9	1.80E-06	**1.00E-08**	**4.38E-08**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	1.20E-06	**6.67E-09**	**2.92E-08**
HAP, POM	Fluoranthene	206-44-0	3.00E-06	**1.67E-08**	**7.30E-08**
HAP, POM	Fluorene	86-73-7	2.80E-06	**1.56E-08**	**6.81E-08**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-06	**1.00E-08**	**4.38E-08**
HAP, POM	Phenanthrene	85-01-8	1.70E-05	**9.44E-08**	**4.14E-07**
HAP, POM	Pyrene	129-00-0	5.00E-06	**2.78E-08**	**1.22E-07**
HAP, POM	Total POM		8.82E-05	**4.90E-07**	**2.15E-06**
	Total HAPs			**1.05E-02**	**4.59E-02**

[1] Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, 5th Edition, Tables 1.4-1, -2, -3 & -4, 7/

Potential Emissions = (Emis. factor, lb/10^6 scf) x (CF/hr) / 10^6 = lb/hr (lb/hr) x 8760 hr/yr / 2000 lb/ton = ton/yr

Project: **CSG - GW**

Subject: Potential Natural Gas Combustion Emission Calculation[1]

Boiler Description: EU127 Space Heater NG

Burner Capacity	5.00	MMBtu/hr
Heat Content	1,050	Btu/CF
Maximum Firing Rate	4,762	CF/Hr
Maximum Annual Fuel use	42	MM CF/yr
Maximum Operating Hours	8,760	hr/yr

HAP?	Pollutant	CAS No.	Em. Factor (lb/10^6 SCF)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Arsenic	7440-38-2	2.00E-04	**9.52E-07**	**4.17E-06**
	Barium	7440-39-3	4.40E-03	**2.10E-05**	**9.18E-05**
HAP	Beryllium	7440-41-7	1.20E-05	**5.71E-08**	**2.50E-07**
HAP	Cadmium	7440-43-9	1.10E-03	**5.24E-06**	**2.29E-05**
HAP	Chromium	7440-47-3	1.40E-03	**6.67E-06**	**2.92E-05**
HAP	Cobalt	7440-48-4	8.40E-05	**4.00E-07**	**1.75E-06**
	Copper	7440-50-8	8.50E-04	**4.05E-06**	**1.77E-05**
HAP	Manganese	7439-96-5	3.80E-04	**1.81E-06**	**7.93E-06**
HAP	Lead		5.00E-04	**2.38E-06**	**1.04E-05**
HAP	Mercury	7439-97-6	2.60E-04	**1.24E-06**	**5.42E-06**
	Molybdenum	7439-98-7	1.10E-03	**5.24E-06**	**2.29E-05**
HAP	NIckel	7440-02-0	2.10E-03	**1.00E-05**	**4.38E-05**
HAP	Selenium	7782-49-2	2.40E-05	**1.14E-07**	**5.01E-07**
	Vanadium	7440-62-2	2.30E-03	**1.10E-05**	**4.80E-05**
	Zinc	7440-66-6	2.90E-02	**1.38E-04**	**6.05E-04**
HAP	Benzene	71-43-2	2.10E-03	**1.00E-05**	**4.38E-05**
	Butane	106-97-8	2.1	**1.00E-02**	**4.38E-02**
HAP	Dichlorobenzene	25321-22-6	1.20E-03	**5.71E-06**	**2.50E-05**
	Ethane	74-84-0	3.1	**1.48E-02**	**6.47E-02**
HAP	Formaldehyde	50-00-0	7.50E-02	**3.57E-04**	**1.56E-03**
HAP	Hexane	110-54-3	1.8	**8.57E-03**	**3.75E-02**
HAP	Naphthalene	91-20-3	6.10E-04	**2.90E-06**	**1.27E-05**
	Pentane	109-66-0	2.6	**1.24E-02**	**5.42E-02**
	Propane	74-98-6	1.6	**7.62E-03**	**3.34E-02**
HAP	Toluene	108-88-3	3.40E-03	**1.62E-05**	**7.09E-05**
HAP, POM	2-Methylnaphthalene	91-57-6	2.40E-05	**1.14E-07**	**5.01E-07**
HAP, POM	3-Methylchloroanthrene	56-49-5	1.80E-06	**8.57E-09**	**3.75E-08**
HAP, POM	7,12-Dimethylbenz(a)anthracene		1.60E-05	**7.62E-08**	**3.34E-07**
HAP, POM	Acenaphthene	83-32-9	1.80E-06	**8.57E-09**	**3.75E-08**
HAP, POM	Acenaphthylene	203-96-8	1.80E-06	**8.57E-09**	**3.75E-08**
HAP, POM	Anthracene	120-12-7	2.40E-06	**1.14E-08**	**5.01E-08**
HAP, POM	Benz(a)anthracene	56-55-3	1.80E-06	**8.57E-09**	**3.75E-08**
HAP, POM	Benzo(a)pyrene	50-32-8	1.20E-06	**5.71E-09**	**2.50E-08**
HAP, POM	Benzo(b)fluoranthene	205-99-2	1.80E-06	**8.57E-09**	**3.75E-08**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	1.20E-06	**5.71E-09**	**2.50E-08**
HAP, POM	Benzo(k)fluoranthene	205-82-3	1.80E-06	**8.57E-09**	**3.75E-08**
HAP, POM	Chrysene	218-01-9	1.80E-06	**8.57E-09**	**3.75E-08**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	1.20E-06	**5.71E-09**	**2.50E-08**
HAP, POM	Fluoranthene	206-44-0	3.00E-06	**1.43E-08**	**6.26E-08**
HAP, POM	Fluorene	86-73-7	2.80E-06	**1.33E-08**	**5.84E-08**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-06	**8.57E-09**	**3.75E-08**
HAP, POM	Phenanthrene	85-01-8	1.70E-05	**8.10E-08**	**3.55E-07**
HAP, POM	Pyrene	129-00-0	5.00E-06	**2.38E-08**	**1.04E-07**
HAP, POM	Total POM		8.82E-05	**4.20E-07**	**1.84E-06**
	Total HAPs			**8.99E-03**	**3.94E-02**

[1] Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, 5th Edition, Tables 1.4-1, -2, -3 & -4, 7/

Potential Emissions = (Emis. factor, lb/10^6 scf) x (CF/hr) / 10^6 = lb/hr (lb/hr) x 8760 hr/yr / 2000 lb/ton = ton/yr

Project: **CSG - GW**

Subject: Potential Natural Gas Combustion Emission Calculation[1]

Boiler Description: EU128 Curing Oven

Burner Capacity	2.50	MMBtu/hr
Heat Content	1,050	Btu/CF
Maximum Firing Rate	2,381	CF/Hr
Maximum Annual Fuel use	21	MM CF/yr
Maximum Operating Hours	8,760	hr/yr

HAP?	Pollutant	CAS No.	Em. Factor (lb/10^6 SCF)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Arsenic	7440-38-2	2.00E-04	**4.76E-07**	**2.09E-06**
	Barium	7440-39-3	4.40E-03	**1.05E-05**	**4.59E-05**
HAP	Beryllium	7440-41-7	1.20E-05	**2.86E-08**	**1.25E-07**
HAP	Cadmium	7440-43-9	1.10E-03	**2.62E-06**	**1.15E-05**
HAP	Chromium	7440-47-3	1.40E-03	**3.33E-06**	**1.46E-05**
HAP	Cobalt	7440-48-4	8.40E-05	**2.00E-07**	**8.76E-07**
	Copper	7440-50-8	8.50E-04	**2.02E-06**	**8.86E-06**
HAP	Manganese	7439-96-5	3.80E-04	**9.05E-07**	**3.96E-06**
HAP	Lead		5.00E-04	**1.19E-06**	**5.21E-06**
HAP	Mercury	7439-97-6	2.60E-04	**6.19E-07**	**2.71E-06**
	Molybdenum	7439-98-7	1.10E-03	**2.62E-06**	**1.15E-05**
HAP	NIckel	7440-02-0	2.10E-03	**5.00E-06**	**2.19E-05**
HAP	Selenium	7782-49-2	2.40E-05	**5.71E-08**	**2.50E-07**
	Vanadium	7440-62-2	2.30E-03	**5.48E-06**	**2.40E-05**
	Zinc	7440-66-6	2.90E-02	**6.90E-05**	**3.02E-04**
HAP	Benzene	71-43-2	2.10E-03	**5.00E-06**	**2.19E-05**
	Butane	106-97-8	2.1	**5.00E-03**	**2.19E-02**
HAP	Dichlorobenzene	25321-22-6	1.20E-03	**2.86E-06**	**1.25E-05**
	Ethane	74-84-0	3.1	**7.38E-03**	**3.23E-02**
HAP	Formaldehyde	50-00-0	7.50E-02	**1.79E-04**	**7.82E-04**
HAP	Hexane	110-54-3	1.8	**4.29E-03**	**1.88E-02**
HAP	Naphthalene	91-20-3	6.10E-04	**1.45E-06**	**6.36E-06**
	Pentane	109-66-0	2.6	**6.19E-03**	**2.71E-02**
	Propane	74-98-6	1.6	**3.81E-03**	**1.67E-02**
HAP	Toluene	108-88-3	3.40E-03	**8.10E-06**	**3.55E-05**
HAP, POM	2-Methylnaphthalene	91-57-6	2.40E-05	**5.71E-08**	**2.50E-07**
HAP, POM	3-Methylchloroanthrene	56-49-5	1.80E-06	**4.29E-09**	**1.88E-08**
HAP, POM	7,12-Dimethylbenz(a)anthracene		1.60E-05	**3.81E-08**	**1.67E-07**
HAP, POM	Acenaphthene	83-32-9	1.80E-06	**4.29E-09**	**1.88E-08**
HAP, POM	Acenaphthylene	203-96-8	1.80E-06	**4.29E-09**	**1.88E-08**
HAP, POM	Anthracene	120-12-7	2.40E-06	**5.71E-09**	**2.50E-08**
HAP, POM	Benz(a)anthracene	56-55-3	1.80E-06	**4.29E-09**	**1.88E-08**
HAP, POM	Benzo(a)pyrene	50-32-8	1.20E-06	**2.86E-09**	**1.25E-08**
HAP, POM	Benzo(b)fluoranthene	205-99-2	1.80E-06	**4.29E-09**	**1.88E-08**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	1.20E-06	**2.86E-09**	**1.25E-08**
HAP, POM	Benzo(k)fluoranthene	205-82-3	1.80E-06	**4.29E-09**	**1.88E-08**
HAP, POM	Chrysene	218-01-9	1.80E-06	**4.29E-09**	**1.88E-08**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	1.20E-06	**2.86E-09**	**1.25E-08**
HAP, POM	Fluoranthene	206-44-0	3.00E-06	**7.14E-09**	**3.13E-08**
HAP, POM	Fluorene	86-73-7	2.80E-06	**6.67E-09**	**2.92E-08**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-06	**4.29E-09**	**1.88E-08**
HAP, POM	Phenanthrene	85-01-8	1.70E-05	**4.05E-08**	**1.77E-07**
HAP, POM	Pyrene	129-00-0	5.00E-06	**1.19E-08**	**5.21E-08**
HAP, POM	Total POM		8.82E-05	**2.10E-07**	**9.20E-07**
	Total HAPs			**4.50E-03**	**1.97E-02**

[1] Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, 5th Edition, Tables 1.4-1, -2, -3 & -4, 7/

Potential Emissions = (Emis. factor, lb/10^6 scf) x (CF/hr) / 10^6 = lb/hr (lb/hr) x 8760 hr/yr / 2000 lb/ton = ton/yr

Project: **CSG - GW**

Subject: Potential Emission Calculations for Diesel Engine

Diesel Generator Description:	EU094 Diesel Geenrator	
Burner Capacity	1.62	MM Btu/hr
Heat Content	19,300	Btu/lb
Maximum Firing Rate	11.80	Gallons/hr
Maximum Annual Fuel use	103	10^3 Gallons/year
Maximum Operating Hours	8,760	hr/yr
Maximum Sulfur Content	0.0015	% by Weight

HAP?	Pollutant	CAS No.	Em. Factor[1] (lb/MM Btu)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Benzene	71-43-2	9.33E-04	**1.51E-03**	**6.61E-03**
HAP	Toluene	108-88-3	4.09E-04	**6.61E-04**	**2.90E-03**
HAP	Xylenes	1330-207	2.85E-04	**4.61E-04**	**2.02E-03**
HAP	Propylene	115-07-1	2.58E-03	**4.17E-03**	**1.83E-02**
HAP	1,3 Butadiene	106-99-0	3.91E-05	**6.32E-05**	**2.77E-04**
HAP	Formaldehyde	50-00-0	1.18E-03	**1.91E-03**	**8.36E-03**
HAP	Acetaldehyde	75-07-0	7.67E-04	**1.24E-03**	**5.43E-03**
HAP	Acrolein	107-02-8	9.25E-05	**1.50E-04**	**6.55E-04**
HAP	Napthalene	91-20-3	8.48E-05	**1.37E-04**	**6.01E-04**
HAP, POM	Acenaphthylene	203-96-8	5.06E-06	**8.18E-06**	**3.58E-05**
HAP, POM	Acenaphthene	83-32-9	1.42E-06	**2.30E-06**	**1.01E-05**
HAP, POM	Fluorene	86-73-7	2.92E-05	**4.72E-05**	**2.07E-04**
HAP, POM	Phenanthrene	85-01-8	2.94E-05	**4.75E-05**	**2.08E-04**
HAP, POM	Anthracene	120-12-7	1.87E-06	**3.02E-06**	**1.32E-05**
HAP, POM	Fluoranthene	206-44-0	7.61E-06	**1.23E-05**	**5.39E-05**
HAP, POM	Pyrene	129-00-0	4.78E-06	**7.73E-06**	**3.39E-05**
HAP, POM	Benz(a)anthracene	56-55-3	1.68E-06	**2.72E-06**	**1.19E-05**
HAP, POM	Chrysene	218-01-9	3.53E-07	**5.71E-07**	**2.50E-06**
HAP, POM	Benzo(b)fluoranthene	205-99-2	9.91E-08	**1.60E-07**	**7.02E-07**
HAP, POM	Benzo(k)fluoranthene	207-08-9	1.55E-07	**2.51E-07**	**1.10E-06**
HAP, POM	Benzo(a)pyrene	50-32-8	1.88E-07	**3.04E-07**	**1.33E-06**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	3.75E-07	**6.06E-07**	**2.66E-06**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	5.83E-07	**9.43E-07**	**4.13E-06**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	4.89E-07	**7.91E-07**	**3.46E-06**
HAP, POM	Polycyclic Organic Matter		8.33E-05	**1.35E-04**	**5.90E-04**
	Total HAPs			**1.04E-02**	**4.57E-02**

[1]Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, Sec. 3.3 Table 3.3-2, 10/96

Maximum Emissions = (Emis. factor, lb/MM BTU) x (MM BTU/hr) = lb/hr, (lb/hr) x (8760 hr/yr) / (2000 lb/ton) = ton/yr

Project: **CSG - GW**

Subject: Potential Emission Calculations for Propane Generator

Diesel Generator Description:	EU 122 - NG Generator	
Burner Capacity	2.05	MM Btu/hr
Heat Content	19,300	Btu/lb
Maximum Firing Rate	14.97	Gallons/hr
Maximum Annual Fuel use	131	10^3 Gallons/year
Maximum Operating Hours	8,760	hr/yr
Maximum Sulfur Content	0.0015	% by Weight

HAP?	Pollutant	CAS No.	Em. Factor[1] (lb/MM Btu)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Benzene	71-43-2	1.58E-03	**3.24E-03**	**1.42E-02**
HAP	Toluene	108-88-3	5.58E-04	**1.14E-03**	**5.01E-03**
HAP	Xylenes	1330-207	1.95E-04	**4.00E-04**	**1.75E-03**
HAP	Formaldehyde	50-00-0	2.05E-02	**4.21E-02**	**1.84E-01**
HAP	Acetaldehyde	75-07-0	2.79E-03	**5.72E-03**	**2.51E-02**
HAP	Acrolein	107-02-8	2.63E-03	**5.40E-03**	**2.36E-02**
HAP	Naphthalene	91-20-3	9.71E-05	**1.99E-04**	**8.73E-04**
HAP	1,1,2,2 Tetrachloroethane	79-34-5	2.53E-05	**5.19E-05**	**2.27E-04**
HAP	1,1,2 Trichloroethane	79-00-5	1.53E-05	**3.14E-05**	**1.37E-04**
HAP	1,3 Dichloropropene	54-27-56	1.27E-05	**2.61E-05**	**1.14E-04**
HAP	Carbon Tetrachloride	56-23-5	1.77E-05	**3.63E-05**	**1.59E-04**
HAP	Chlorobenzene	108-90-7	1.29E-05	**2.65E-05**	**1.16E-04**
HAP	Chloroform	67-66-3	1.37E-05	**2.81E-05**	**1.23E-04**
HAP	Ethylbenzene	100-41-4	2.48E-05	**5.09E-05**	**2.23E-04**
HAP	Ethylene Dibromide	106-93-4	2.13E-05	**4.37E-05**	**1.91E-04**
HAP	Methanol	67-56-1	3.06E-03	**6.28E-03**	**2.75E-02**
HAP	Methylene Chloride	75-09-2	4.12E-05	**8.45E-05**	**3.70E-04**
HAP	Styrene	100-42-5	1.19E-05	**2.44E-05**	**1.07E-04**
HAP	Vinyl Chloride	75-01-4	7.18E-06	**1.47E-05**	**6.45E-05**
HAP, POM	Polycyclic Organic Matter		1.41E-04	**2.89E-04**	**1.27E-03**
	Total HAPs			**6.52E-02**	**2.85E-01**

[1]Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, Sec. 3.2, Table 3.2-3, 7/00

Maximum Emissions = (Emis. factor, lb/MM BTU) x (MM BTU/hr) = lb/hr, (lb/hr) x (500 hr/yr) / (2000 lb/ton) = ton/yr

Project: **CSG - GW**

Subject: Potential Emission Calculations for Diesel Generator

Diesel Generator Description:	EU 123 - Diesel Generator	
Burner Capacity	3.14	MM Btu/hr
Heat Content	19,300	Btu/lb
Maximum Firing Rate	22.90	Gallons/hr
Maximum Annual Fuel use	201	10^3 Gallons/year
Maximum Operating Hours	8,760	hr/yr
Maximum Sulfur Content	0.0015	% by Weight

HAP?	Pollutant	CAS No.	Em. Factor[1] (lb/MM Btu)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Benzene	71-43-2	9.33E-04	**2.93E-03**	**1.28E-02**
HAP	Toluene	108-88-3	4.09E-04	**1.28E-03**	**5.62E-03**
HAP	Xylenes	1330-207	2.85E-04	**8.94E-04**	**3.92E-03**
HAP	Propylene	115-07-1	2.58E-03	**8.10E-03**	**3.55E-02**
HAP	1,3 Butadiene	106-99-0	3.91E-05	**1.23E-04**	**5.37E-04**
HAP	Formaldehyde	50-00-0	1.18E-03	**3.70E-03**	**1.62E-02**
HAP	Acetaldehyde	75-07-0	7.67E-04	**2.41E-03**	**1.05E-02**
HAP	Acrolein	107-02-8	9.25E-05	**2.90E-04**	**1.27E-03**
HAP	Napthalene	91-20-3	8.48E-05	**2.66E-04**	**1.17E-03**
HAP, POM	Acenaphthylene	203-96-8	5.06E-06	**1.59E-05**	**6.95E-05**
HAP, POM	Acenaphthene	83-32-9	1.42E-06	**4.46E-06**	**1.95E-05**
HAP, POM	Fluorene	86-73-7	2.92E-05	**9.16E-05**	**4.01E-04**
HAP, POM	Phenanthrene	85-01-8	2.94E-05	**9.23E-05**	**4.04E-04**
HAP, POM	Anthracene	120-12-7	1.87E-06	**5.87E-06**	**2.57E-05**
HAP, POM	Fluoranthene	206-44-0	7.61E-06	**2.39E-05**	**1.05E-04**
HAP, POM	Pyrene	129-00-0	4.78E-06	**1.50E-05**	**6.57E-05**
HAP, POM	Benz(a)anthracene	56-55-3	1.68E-06	**5.27E-06**	**2.31E-05**
HAP, POM	Chrysene	218-01-9	3.53E-07	**1.11E-06**	**4.85E-06**
HAP, POM	Benzo(b)fluoranthene	205-99-2	9.91E-08	**3.11E-07**	**1.36E-06**
HAP, POM	Benzo(k)fluoranthene	207-08-9	1.55E-07	**4.86E-07**	**2.13E-06**
HAP, POM	Benzo(a)pyrene	50-32-8	1.88E-07	**5.90E-07**	**2.58E-06**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	3.75E-07	**1.18E-06**	**5.15E-06**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	5.83E-07	**1.83E-06**	**8.01E-06**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	4.89E-07	**1.53E-06**	**6.72E-06**
HAP, POM	Polycyclic Organic Matter		8.33E-05	**2.61E-04**	**1.14E-03**
	Total HAPs			**2.03E-02**	**8.87E-02**

[1]Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, Sec. 3.3 Table 3.3-2, 10/96

Maximum Emissions = (Emis. factor, lb/MM BTU) x (MM BTU/hr) = lb/hr, (lb/hr) x (500 hr/yr) / (2000 lb/ton) = ton/yr

Project: **CSG - GW**

Subject: Potential Emission Calculations for Diesel Generator

Diesel Generator Description:	EU 124 - Diesel Generator	
Burner Capacity	1.57	MM Btu/hr
Heat Content	19,300	Btu/lb
Maximum Firing Rate	11.45	Gallons/hr
Maximum Annual Fuel use	100	10^3 Gallons/year
Maximum Operating Hours	8,760	hr/yr
Maximum Sulfur Content	0.0015	% by Weight

HAP?	Pollutant	CAS No.	Em. Factor[1] (lb/MM Btu)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Benzene	71-43-2	9.33E-04	**1.46E-03**	**6.41E-03**
HAP	Toluene	108-88-3	4.09E-04	**6.42E-04**	**2.81E-03**
HAP	Xylenes	1330-207	2.85E-04	**4.47E-04**	**1.96E-03**
HAP	Propylene	115-07-1	2.58E-03	**4.05E-03**	**1.77E-02**
HAP	1,3 Butadiene	106-99-0	3.91E-05	**6.13E-05**	**2.69E-04**
HAP	Formaldehyde	50-00-0	3.91E-05	**6.13E-05**	**2.69E-04**
HAP	Acetaldehyde	75-07-0	1.18E-03	**1.85E-03**	**8.11E-03**
HAP	Acrolein	107-02-8	7.67E-04	**1.20E-03**	**5.27E-03**
HAP	Napthalene	91-20-3	8.48E-05	**1.33E-04**	**5.83E-04**
HAP, POM	Acenaphthylene	203-96-8	8.48E-05	**1.33E-04**	**5.83E-04**
HAP, POM	Acenaphthene	83-32-9	5.06E-06	**7.94E-06**	**3.48E-05**
HAP, POM	Fluorene	86-73-7	1.42E-06	**2.23E-06**	**9.76E-06**
HAP, POM	Phenanthrene	85-01-8	2.92E-05	**4.58E-05**	**2.01E-04**
HAP, POM	Anthracene	120-12-7	2.94E-05	**4.61E-05**	**2.02E-04**
HAP, POM	Fluoranthene	206-44-0	1.87E-06	**2.93E-06**	**1.29E-05**
HAP, POM	Pyrene	129-00-0	7.61E-06	**1.19E-05**	**5.23E-05**
HAP, POM	Benz(a)anthracene	56-55-3	4.78E-06	**7.50E-06**	**3.28E-05**
HAP, POM	Chrysene	218-01-9	1.68E-06	**2.64E-06**	**1.15E-05**
HAP, POM	Benzo(b)fluoranthene	205-99-2	3.53E-07	**5.54E-07**	**2.43E-06**
HAP, POM	Benzo(k)fluoranthene	207-08-9	9.91E-08	**1.55E-07**	**6.81E-07**
HAP, POM	Benzo(a)pyrene	50-32-8	1.55E-07	**2.43E-07**	**1.07E-06**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	1.88E-07	**2.95E-07**	**1.29E-06**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	3.75E-07	**5.88E-07**	**2.58E-06**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	5.83E-07	**9.15E-07**	**4.01E-06**
HAP, POM	Polycyclic Organic Matter		4.89E-07	**7.67E-07**	**3.36E-06**
	Total HAPs		1.68E-04	**9.91E-03**	**4.34E-02**

[1]Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, Sec. 3.3 Table 3.3-2, 10/96

Maximum Emissions = (Emis. factor, lb/MM BTU) x (MM BTU/hr) = lb/hr, (lb/hr) x (500 hr/yr) / (2000 lb/ton) = ton/yr

Project: **CSG - GW**

Subject: Potential Emission Calculations for Diesel Generator

Diesel Generator Description:	EU 129 - Diesel Generator	
Burner Capacity	0.07	MM Btu/hr
Heat Content	19,300	Btu/lb
Maximum Firing Rate	11.45	Gallons/hr
Maximum Annual Fuel use	100	10^3 Gallons/year
Maximum Operating Hours	8,760	hr/yr
Maximum Sulfur Content	0.0015	% by Weight

HAP?	Pollutant	CAS No.	Em. Factor[1] (lb/MM Btu)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Benzene	71-43-2	9.33E-04	**6.16E-05**	**2.70E-04**
HAP	Toluene	108-88-3	4.09E-04	**2.70E-05**	**1.18E-04**
HAP	Xylenes	1330-207	2.85E-04	**1.88E-05**	**8.24E-05**
HAP	Propylene	115-07-1	2.58E-03	**1.70E-04**	**7.46E-04**
HAP	1,3 Butadiene	106-99-0	3.91E-05	**2.58E-06**	**1.13E-05**
HAP	Formaldehyde	50-00-0	3.91E-05	**2.58E-06**	**1.13E-05**
HAP	Acetaldehyde	75-07-0	1.18E-03	**7.79E-05**	**3.41E-04**
HAP	Acrolein	107-02-8	7.67E-04	**5.06E-05**	**2.22E-04**
HAP	Napthalene	91-20-3	8.48E-05	**5.60E-06**	**2.45E-05**
HAP, POM	Acenaphthylene	203-96-8	8.48E-05	**5.60E-06**	**2.45E-05**
HAP, POM	Acenaphthene	83-32-9	5.06E-06	**3.34E-07**	**1.46E-06**
HAP, POM	Fluorene	86-73-7	1.42E-06	**9.37E-08**	**4.10E-07**
HAP, POM	Phenanthrene	85-01-8	2.92E-05	**1.93E-06**	**8.44E-06**
HAP, POM	Anthracene	120-12-7	2.94E-05	**1.94E-06**	**8.50E-06**
HAP, POM	Fluoranthene	206-44-0	1.87E-06	**1.23E-07**	**5.41E-07**
HAP, POM	Pyrene	129-00-0	7.61E-06	**5.02E-07**	**2.20E-06**
HAP, POM	Benz(a)anthracene	56-55-3	4.78E-06	**3.15E-07**	**1.38E-06**
HAP, POM	Chrysene	218-01-9	1.68E-06	**1.11E-07**	**4.86E-07**
HAP, POM	Benzo(b)fluoranthene	205-99-2	3.53E-07	**2.33E-08**	**1.02E-07**
HAP, POM	Benzo(k)fluoranthene	207-08-9	9.91E-08	**6.54E-09**	**2.86E-08**
HAP, POM	Benzo(a)pyrene	50-32-8	1.55E-07	**1.02E-08**	**4.48E-08**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	1.88E-07	**1.24E-08**	**5.43E-08**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	3.75E-07	**2.48E-08**	**1.08E-07**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	5.83E-07	**3.85E-08**	**1.69E-07**
HAP, POM	Polycyclic Organic Matter		4.89E-07	**3.23E-08**	**1.41E-07**
	Total HAPs		1.68E-04	**4.17E-04**	**1.83E-03**

[1]Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, Sec. 3.3 Table 3.3-2, 10/96

Maximum Emissions = (Emis. factor, lb/MM BTU) x (MM BTU/hr) = lb/hr, (lb/hr) x (500 hr/yr) / (2000 lb/ton) = ton/yr

Project: **CSG - GW**
Subject: Potential Natural Gas Combustion Emission Calculations[1]

Heater Description: EU096B Thermal Reclaim

Burner Capacity	4.67	MM Btu/hr
Heat Content	1,050	Btu/CF
Maximum Firing Rate	4,448	CF/Hr
Maximum Annual Fuel use	39	MM CF/yr
Maximum Operating Hours	8,760	hr/yr

HAP?	Pollutant	CAS No.	Em. Factor (lb/10^6 SCF)	Max. Emission Rate (lb/hr)	(ton/yr)
HAP	Arsenic	7440-38-2	2.00E-04	**8.90E-07**	**3.90E-06**
	Barium	7440-39-3	4.40E-03	**1.96E-05**	**8.57E-05**
HAP	Beryllium	7440-41-7	1.20E-05	**5.34E-08**	**2.34E-07**
HAP	Cadmium	7440-43-9	1.10E-03	**4.89E-06**	**2.14E-05**
HAP	Chromium	7440-47-3	1.40E-03	**6.23E-06**	**2.73E-05**
HAP	Cobalt	7440-48-4	8.40E-05	**3.74E-07**	**1.64E-06**
	Copper	7440-50-8	8.50E-04	**3.78E-06**	**1.66E-05**
HAP	Manganese	7439-96-5	3.80E-04	**1.69E-06**	**7.40E-06**
HAP	Lead		5.00E-04	**2.22E-06**	**9.74E-06**
HAP	Mercury	7439-97-6	2.60E-04	**1.16E-06**	**5.06E-06**
	Molybdenum	7439-98-7	1.10E-03	**4.89E-06**	**2.14E-05**
HAP	NIckel	7440-02-0	2.10E-03	**9.34E-06**	**4.09E-05**
HAP	Selenium	7782-49-2	2.40E-05	**1.07E-07**	**4.68E-07**
	Vanadium	7440-62-2	2.30E-03	**1.02E-05**	**4.48E-05**
	Zinc	7440-66-6	2.90E-02	**1.29E-04**	**5.65E-04**
HAP	Benzene	71-43-2	2.10E-03	**9.34E-06**	**4.09E-05**
	Butane	106-97-8	2.1	**9.34E-03**	**4.09E-02**
HAP	Dichlorobenzene	25321-22-6	1.20E-03	**5.34E-06**	**2.34E-05**
	Ethane	74-84-0	3.1	**1.38E-02**	**6.04E-02**
HAP	Formaldehyde	50-00-0	7.50E-02	**3.34E-04**	**1.46E-03**
HAP	Hexane	110-54-3	1.8	**8.01E-03**	**3.51E-02**
HAP	Naphthalene	91-20-3	6.10E-04	**2.71E-06**	**1.19E-05**
	Pentane	109-66-0	2.6	**1.16E-02**	**5.06E-02**
	Propane	74-98-6	1.6	**7.12E-03**	**3.12E-02**
HAP	Toluene	108-88-3	3.40E-03	**1.51E-05**	**6.62E-05**
HAP, POM	2-Methylnaphthalene	91-57-6	2.40E-05	**1.07E-07**	**4.68E-07**
HAP, POM	3-Methylchloroanthrene	56-49-5	1.80E-06	**8.01E-09**	**3.51E-08**
HAP, POM	7,12-Dimethylbenz(a)anthracene		1.60E-05	**7.12E-08**	**3.12E-07**
HAP, POM	Acenaphthene	83-32-9	1.80E-06	**8.01E-09**	**3.51E-08**
HAP, POM	Acenaphthylene	203-96-8	1.80E-06	**8.01E-09**	**3.51E-08**
HAP, POM	Anthracene	120-12-7	2.40E-06	**1.07E-08**	**4.68E-08**
HAP, POM	Benz(a)anthracene	56-55-3	1.80E-06	**8.01E-09**	**3.51E-08**
HAP, POM	Benzo(a)pyrene	50-32-8	1.20E-06	**5.34E-09**	**2.34E-08**
HAP, POM	Benzo(b)fluoranthene	205-99-2	1.80E-06	**8.01E-09**	**3.51E-08**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	1.20E-06	**5.34E-09**	**2.34E-08**
HAP, POM	Benzo(k)fluoranthene	205-82-3	1.80E-06	**8.01E-09**	**3.51E-08**
HAP, POM	Chrysene	218-01-9	1.80E-06	**8.01E-09**	**3.51E-08**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	1.20E-06	**5.34E-09**	**2.34E-08**
HAP, POM	Fluoranthene	206-44-0	3.00E-06	**1.33E-08**	**5.84E-08**
HAP, POM	Fluorene	86-73-7	2.80E-06	**1.25E-08**	**5.45E-08**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-06	**8.01E-09**	**3.51E-08**
HAP, POM	Phenanthrene	85-01-8	1.70E-05	**7.56E-08**	**3.31E-07**
HAP, POM	Pyrene	129-00-0	5.00E-06	**2.22E-08**	**9.74E-08**
HAP, POM	Total POM		8.82E-05	**3.92E-07**	**1.72E-06**
	Total HAPs			**8.40E-03**	**3.68E-02**

[1] Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, 5th Edition, Tables 1.4-1, -2, -3 & -4, 7/98

Potential Emissions = (Emis. factor, lb/10^6 scf) x (CF/hr) / 10^6 = lb/hr (lb/hr) x 8760 hr/yr / 2000 lb/ton = ton/yr

CSG - GW

VOC Emission Sources

Emission Unit		Unit Capacity	Pollutant	Max. Content	Transfer Efficiency	Uncontrolled Emission[1]		Capture Efficiency	Control Efficiency	Controlled Emisssions	
Number	Name	gallons/hour		lb/gal	%	lb/hr	ton/yr			lb/hr	ton/yr
EU003	Support Services Paint Room	1.067	PM/PM-10/PM2.5	10.36	75%	2.76	12.10	100%	85%	0.41	1.82
			VOC	3.7		3.95	17.29	100%	0%	3.95	17.29
			Toluene	1.01		1.08	4.72	100%	0%	1.08	4.72
			Xylene	6.09		6.50	28.46	100%	0%	6.50	28.46
			Ethylbenzene	2.66		2.84	12.43	100%	0%	2.84	12.43
			Ethylene Glycol	0.32		0.34	1.50	100%	0%	0.34	1.50
			Total HAP			10.85	47.53			10.85	47.53
			HDI	0.09		0.10	0.42	100%	0%	0.10	0.42
EU057	Foundry Paint Booth	1.73	PM/PM-10/PM2.5	2.83	70%	1.47	6.43	80%	85%	0.47	2.06
			VOC	6.04		10.45	45.77	100%	0%	10.45	45.77
			Toluene	0.525		0.91	3.98	100%	0%	0.91	3.98
			Xylene	0.814		1.41	6.17	100%	0%	1.41	6.17
			Ethylbenzene	0.15		0.26	1.14	100%	0%	0.26	1.14
			Total HAP			3.09	13.56			3.09	13.56
			MIBK	0.3		0.52	2.27	100%	0%	0.52	2.27
EU 063	East Sand Mixer	5.05	VOC	0.017		0.09	0.38	100%	0%	0.09	0.38
EU 097	West Sand Mixer	5.05	VOC	0.017		0.09	0.38	100%	0%	0.09	0.38
EU103	Foundry Lacquer Booth (Existing)	0.54	PM/PM-10/PM2.5	6.74	70%	1.09	4.78	100%	85%	0.16	0.72
			VOC	9.17		4.95	21.69	100%	0%	4.95	21.69
			Xylene	0.3886		0.21	0.92	100%	0%	0.21	0.92
			Total HAP			0.44	1.92			0.44	1.92
			Ethylbenzene	0.4245		0.23	1.00	100%	0%	0.23	1.00
EU125	Foundry Lacquer Booth (Proposed)	0.54	PM/PM-10/PM2.5	3	70%	0.49	2.13	100%	85%	0.07	0.32
			VOC	5.27		2.85	12.46	100%	0%	2.85	12.46
			Total Hap			0.90	3.92			0.90	3.92
			Xylene	1.4183		0.77	3.35	100%	0%	0.77	3.35
			Ethylbenzene	0.2398		0.13	0.57	100%	0%	0.13	0.57
EU118	5 Hilite Panel Filters	5	PM/PM-10/PM2.5	1.84	75%	2.30	10.07	80%	85%	0.74	3.22
			VOC	6.98		34.90	152.86	100%	0%	34.90	152.86
			Total HAP			59.05	258.64			59.05	258.64
			Xylene	2.88		14.40	63.07	100%	0%	14.40	63.07
			Ethylbenzene	3.84		19.20	84.10	100%	0%	19.20	84.10
			MIBK	5.09		25.45	111.47	100%	0%	25.45	111.47
EU119	1 Hilite Panel Filter	1	PM/PM-10/PM2.5	1.84	75%	0.46	2.01	80%	85%	0.15	0.64
			VOC	6.98		6.98	30.57	100%	0%	6.98	30.57
			Total HAP			11.81	51.73			11.81	51.73
			Xylene	2.88		2.88	12.61	100%	0%	2.88	12.61
			Ethylbenzene	3.84		3.84	16.82	100%	0%	3.84	16.82
			MIBK	5.09		5.09	22.29	100%	0%	5.09	22.29

[1] Emission factors from material balance. Data from MSDSs, "Form R Reporting of Binder Chemicals Used in Foundries", AFS, 98, and manufacturer data

HAP Emissions from Resin Use EU 063 and EU097 Emission factors from "Calculating Emission Factors for Pouring, Cooling, and Shakeout", Modern Casting, October 1994.

Sand Binder			
Index usage =	80.72	lb/hr	Each Mixer
Pollutant	Emission Factor	Uncontrolled Emissions	
	(lb/lb index)	(lb/hr)	(ton/yr)
Acetaldehyde	0.000197	0.0159	0.0697
Acrolein	0.000028	0.0023	0.0099
Benzene	0.014600	1.1785	5.1619
Formaldehyde	0.000267	0.0216	0.0944
Hydrogen Cyanide	0.000421	0.0340	0.1488
Naphthalene	0.000100	0.0081	0.0354
Phenol	0.001496	0.1208	0.5289
Toluene	0.002776	0.2241	0.9815
Xylenes	0.002955	0.2385	1.0448

CSG - GW
Particulate Sources

				Control Efficiency			Emission Factors				
Emission Unit	Name	Unit Capacity	Capacity Units/hour	Capture Efficiency	PM Control Efficiency	PM10/PM2.5 Control Efficiency	PM (lb/units)	PM10/PM2.5 (lb/units)	Pb (lb/units)	Sb (lb/units)	Ni (lb/units)
EU029	South Tumbler	3	tons granite	100%	99%	93%	66	3.5	0	0	0
EU054A	Monuwest Sandblast N	2.66664	1000 lbs abrasive	100%	99%	93%	91	13	0	0	0
EU054B	Monuwest Hand Polish N	18	sq. ft.granite	80%	99%	93%	0.048	0.048	0	0	0
EU054 Tot											
EU055A	Monuwest Hand Polish W	15	sq. ft.granite	80%	99%	93%	0.048	0.048	0	0	0
EU055B*	Monuwest Pedestal Grind W	0.025	tons meta	80%	99%	93%	17	1.7	0	0	0
EU055C	Monuwest Splitters W	20	tons granite	80%	99%	93%	0.0054	0.0054	0	0	0
EU055 Tot											
EU059	Shakeout	2	tons metal charged	80%	99%	93%	3.2	2.24	0	0	0
EU060	Induction Furnace	0.5	tons metal charged	80%	99%	93%	0.986	0.942	0.01972	0	0
EU063	East Sand Mixer (+ VOC/HAP)	5.05	tons sand	100%	99%	93%	3.6	0.54	0	0	0
EU065	Vibra Mill #1	5.05	tons sand	100%	99%	93%	3.6	0.54	0	0	0
EU066	Pouring & Cooling	2	tons metal charged	80%	99%	93%	4.6	2.256	0.115	0.0092	0.0368
EU068	Induction Furnace	0.5	tons metal charged	80%	99%	93%	0.986	0.942	0.01972	0	0
EU069	Induction Furnace	0.5	tons metal charged	80%	99%	93%	0.986	0.942	0.01972	0	0
EU070	Induction Furnace	0.5	tons metal charged	80%	99%	93%	0.986	0.942	0.01972	0	0
EU095	Vibra Mill #2	5.05	tons sand	100%	99%	93%	3.6	0.54	0	0	0
EU096A	Thermal Reclaim	3	tons sand	100%	99%	93%	3.6	0.54	0	0	0
EU096B	combustion part of thermal reclair										
EU096 tot											
EU097	West Sand Mixer (+ VOC/HAP	5.05	tons sand	100%	99%	93%	3.6	0.54	0	0	0
EU120	Foundry Finishing	2	tons metal charged	80%	99%	93%	17	1.7	0.425	0	0
EU121A	Diam. Dept. Grinding	0.3125	tons meta	80%	99%	93%	17	1.7	0	0	0
EU121B	Diam. Dept. Powder Mi	0.015	tons powder	80%	99%	93%	20	17	0	0	0
EU121C	Diam. Dept. Sandblas	0.3	1000 lbs abrasive	100%	99%	93%	91	13	0	0	0
EU121 Tot**											

* Not tracked in permit, PTE accounted for in GP018 limi
** Not tracked in permit (GP018), PTE counted in total facility emissior

Total HAP

Uncontrolled Emissions										Controlled Emissions			
PM (lb/hr)	PM10/PM2.5 (lb/hr)	Pb (lb/hr)	Sb (lb/hr)	Ni (lb/hr)	PM (ton/yr)	PM10/PM2.5 (ton/yr)	Pb (ton/yr)	Sb (ton/yr)	Ni (ton/yr)	PM (lb/hr)	PM10/PM2.5 (lb/hr)	PM (ton/yr)	PM10/PM2.5 (ton/yr)
198.00	10.50	0.0000	0.0000	0.0000	867.24	45.99	0.0000	0.0000	0.0000	1.980	0.735	8.672	3.219
246.58	38.59	0.0000	0.0000	0.0000	1080.04	169.01	0.0000	0.0000	0.0000	2.466	2.701	10.800	11.831
0.86	0.86	0.0000	0.0000	0.0000	3.78	3.78	0.0000	0.0000	0.0000	0.180	0.221	0.787	0.969
247.45	39.45				1083.82	172.79				2.646	2.922	11.588	12.799
0.72	0.72	0.0000	0.0000	0.0000	3.15	3.15	0.0000	0.0000	0.0000	0.150	0.184	0.656	0.807
0.43	0.04	0.0000	0.0000	0.0000	1.86	0.19	0.0000	0.0000	0.0000	0.088	0.011	0.387	0.048
0.11	0.11	0.0000	0.0000	0.0000	0.47	0.47	0.0000	0.0000	0.0000	0.022	0.028	0.098	0.121
1.25	0.87				5.49	3.81				0.26	0.22	1.14	0.98
6.40	4.48	0.0000	0.0000	0.0000	28.03	19.62	0.0000	0.0000	0.0000	1.331	1.147	5.831	5.023
0.49	0.47	0.0099	0.0000	0.0000	2.16	2.06	0.0432	0.0000	0.0000	0.103	0.121	0.449	0.528
18.18	2.73	0.0000	0.0000	0.0000	79.63	11.94	0.0000	0.0000	0.0000	0.182	0.191	0.796	0.836
18.18	2.73	0.0000	0.0000	0.0000	79.63	11.94	0.0000	0.0000	0.0000	0.182	0.191	0.796	0.836
9.20	4.51	0.2300	0.0184	0.0736	40.30	19.76	1.0074	0.0806	0.3224	1.914	1.155	8.382	5.059
0.49	0.47	0.0099	0.0000	0.0000	2.16	2.06	0.0432	0.0000	0.0000	0.103	0.121	0.449	0.528
0.49	0.47	0.0099	0.0000	0.0000	2.16	2.06	0.0432	0.0000	0.0000	0.103	0.121	0.449	0.528
0.49	0.47	0.0099	0.0000	0.0000	2.16	2.06	0.0432	0.0000	0.0000	0.103	0.121	0.449	0.528
18.18	2.73	0.0000	0.0000	0.0000	79.63	11.94	0.0000	0.0000	0.0000	0.182	0.191	0.796	0.836
10.80	1.62	0.0000	0.0000	0.0000	47.30	7.10	0.0000	0.0000	0.0000	0.108	0.113	0.473	0.497
0.04	0.04	0.0000			0.16	0.16	0.0000			0.036	0.036	0.156	0.156
10.84	1.66				47.46	7.25				0.144	0.149	0.630	0.653
18.18	2.73	0.0000	0.0000	0.0000	79.63	11.94	0.0000	0.0000	0.0000	0.182	0.191	0.796	0.836
34.00	3.40	0.8500	0.0000	0.0000	148.92	14.89	3.7230	0.0000	0.0000	7.072	0.870	30.975	3.812
5.31	0.53	0.0000	0.0000	0.0000	23.27	2.33	0.0000	0.0000	0.0000	1.105	0.136	4.840	0.596
0.30	0.26	0.0000	0.0000	0.0000	1.31	1.12	0.0000	0.0000	0.0000	0.062	0.065	0.273	0.286
27.30	3.90	0.0000	0.0000	0.0000	119.57	17.08	0.0000	0.0000	0.0000	0.273	0.273	1.196	1.196
32.9125	4.6863				144.1568	20.5258				1.4404	0.4743	6.3090	2.0773

EU066 0.3220 lb/hr
1.4104 tpy

CSG - GW
Crushing Pad & Plant Haul Road

Assume 10, 10-cyd skips per shift and 14 tons per skip

Max. Throughput = 10 skips/shift x 14 tons/skip x 3 shifts/day x 7 day/wk x 52 weeks/year = 152,880 tons/year

Aggregate Processing Emissions

				Uncontrolled Emission Factors			Controlled Emission Factors			Uncontrolled Emissions						Controlled Emissions					
Name	SCC	Unit Capacity	Capacity	PM (lb/ton)	PM10 (lb/ton)	PM2.5 (lb/ton)	PM (lb/ton)	PM10 (lb/ton)	PM2.5 (lb/ton)	PM (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)	PM (ton/yr)	PM10 (ton/yr)	PM2.5 (ton/yr)	PM (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)	PM (ton/yr)	PM10 (ton/yr)	PM2.5 (ton/yr)
Crushing	305003003	100	tons granite	0.0054	0.0024	0.0024	0.00120	0.00054	0.00010	0.54	0.24	0.24	0.41	0.18	0.18	0.12	0.05	0.01	0.09	0.04	0.01
Screening	305002002	100	tons granite	0.0250	0.0087	0.0087	0.00220	0.00074	0.00005	2.50	0.87	0.87	1.91	0.67	0.67	0.22	0.07	0.01	0.17	0.06	0.00
Transfer	305002006	100	tons granite	0.0030	0.0011	0.0011	0.00014	4.60E-05	1.30E-05	0.30	0.11	0.11	0.23	0.08	0.08	0.01	0.00	0.00	0.01	0.00	0.00
Truck Loading	305002031	100	tons granite	0.0001	0.0001	0.0001	0.00010	0.00010	0.00010	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Sum										3.35	1.23	1.23	2.56	0.94	0.94	0.36	0.14	0.03	0.28	0.11	0.02

Emission Factors from Compilation of Air Pollutant Emission Factors, AP-42, Section 11.19.2, U.S. EPA, 08/04

Unpaved Plant Haul Road Fugitive Emissions

Equation 1a from Compilation of Air Pollutant Emission Factors, AP-42, Section 13.2.2, U.S. EPA, 08/04

$E = k\ (s/12)^a\ (W/3)^b$

Where,
E = lb/VMT
k, a, and b are empirical contants from Table 13.2.2-2
s = surface material silt content (%)
W = mean vehicle weight (tons)

Let,
s = 10% from Table 13.2.2-1 for Stone Quarrying and Processing Plant Road
W = 50 tons GVW per truck
k = 4.9 for PM
= 1.5 for PM-10
= 0.15 for PM-2.5
a = 0.7 for PM
= 0.9 for PM-10 & PM-2.5
b = 0.45

No. of Trucks / hour = 100 tons/hr x truck/20 tons = 5 trucks/hour
No. of Trucks / year = 152,880 tons/hr x truck/20 tons = 7,644 trucks/hour

VMT / hour = 5 trucks/hour x 1 mile/round trip = 5
VMT / year = 7644 trucks/year x 1 mile/round trip = 7644

Pollutant	k	s	a	b	W	VMT	**E**
PM, lb/hr	4.9	10%	0.7	0.45	50	5	**3.04 lb/hr**
PM, ton/yr	4.9	10%	0.7	0.45	50	7644	**2.33 ton/yr**
PM-10, lb/hr	1.5	10%	0.9	0.45	50	5	**0.36 lb/hr**
PM-10, ton/yr	1.5	10%	0.9	0.45	50	7644	**0.27 ton/yr**
PM-2.5, lb/hr	0.15	10%	0.9	0.45	50	5	**0.04 lb/hr**
PM-2.5, ton/yr	0.15	10%	0.9	0.45	50	7644	**0.03 ton/yr**

Project: **CSG - GW**

Subject: Potential Natural Gas Combustion Emission Calculation[1]

Boiler Description: Insignificant Space Heaters

Burner Capacity	27.12	MMBtu/hr
Heat Content	1,050	Btu/CF
Maximum Firing Rate	25,829	CF/Hr
Maximum Annual Fuel use	226	MM CF/yr
Maximum Operating Hours	8,760	hr/yr

HAP?	Pollutant	CAS No.	Em. Factor (lb/10^6 SCF)	Max. Emission Rate (lb/hr)	Max. Emission Rate (ton/yr)
HAP	Arsenic	7440-38-2	2.00E-04	**5.17E-06**	**2.26E-05**
	Barium	7440-39-3	4.40E-03	**1.14E-04**	**4.98E-04**
HAP	Beryllium	7440-41-7	1.20E-05	**3.10E-07**	**1.36E-06**
HAP	Cadmium	7440-43-9	1.10E-03	**2.84E-05**	**1.24E-04**
HAP	Chromium	7440-47-3	1.40E-03	**3.62E-05**	**1.58E-04**
HAP	Cobalt	7440-48-4	8.40E-05	**2.17E-06**	**9.50E-06**
	Copper	7440-50-8	8.50E-04	**2.20E-05**	**9.62E-05**
HAP	Manganese	7439-96-5	3.80E-04	**9.81E-06**	**4.30E-05**
HAP	Lead		5.00E-04	**1.29E-05**	**5.66E-05**
HAP	Mercury	7439-97-6	2.60E-04	**6.72E-06**	**2.94E-05**
	Molybdenum	7439-98-7	1.10E-03	**2.84E-05**	**1.24E-04**
HAP	NIckel	7440-02-0	2.10E-03	**5.42E-05**	**2.38E-04**
HAP	Selenium	7782-49-2	2.40E-05	**6.20E-07**	**2.72E-06**
	Vanadium	7440-62-2	2.30E-03	**5.94E-05**	**2.60E-04**
	Zinc	7440-66-6	2.90E-02	**7.49E-04**	**3.28E-03**
HAP	Benzene	71-43-2	2.10E-03	**5.42E-05**	**2.38E-04**
	Butane	106-97-8	2.1	**5.42E-02**	**2.38E-01**
HAP	Dichlorobenzene	25321-22-6	1.20E-03	**3.10E-05**	**1.36E-04**
	Ethane	74-84-0	3.1	**8.01E-02**	**3.51E-01**
HAP	Formaldehyde	50-00-0	7.50E-02	**1.94E-03**	**8.48E-03**
HAP	Hexane	110-54-3	1.8	**4.65E-02**	**2.04E-01**
HAP	Naphthalene	91-20-3	6.10E-04	**1.58E-05**	**6.90E-05**
	Pentane	109-66-0	2.6	**6.72E-02**	**2.94E-01**
	Propane	74-98-6	1.6	**4.13E-02**	**1.81E-01**
HAP	Toluene	108-88-3	3.40E-03	**8.78E-05**	**3.85E-04**
HAP, POM	2-Methylnaphthalene	91-57-6	2.40E-05	**6.20E-07**	**2.72E-06**
HAP, POM	3-Methylchloroanthrene	56-49-5	1.80E-06	**4.65E-08**	**2.04E-07**
HAP, POM	7,12-Dimethylbenz(a)anthracene		1.60E-05	**4.13E-07**	**1.81E-06**
HAP, POM	Acenaphthene	83-32-9	1.80E-06	**4.65E-08**	**2.04E-07**
HAP, POM	Acenaphthylene	203-96-8	1.80E-06	**4.65E-08**	**2.04E-07**
HAP, POM	Anthracene	120-12-7	2.40E-06	**6.20E-08**	**2.72E-07**
HAP, POM	Benz(a)anthracene	56-55-3	1.80E-06	**4.65E-08**	**2.04E-07**
HAP, POM	Benzo(a)pyrene	50-32-8	1.20E-06	**3.10E-08**	**1.36E-07**
HAP, POM	Benzo(b)fluoranthene	205-99-2	1.80E-06	**4.65E-08**	**2.04E-07**
HAP, POM	Benzo(g,h,I)perylene	191-24-2	1.20E-06	**3.10E-08**	**1.36E-07**
HAP, POM	Benzo(k)fluoranthene	205-82-3	1.80E-06	**4.65E-08**	**2.04E-07**
HAP, POM	Chrysene	218-01-9	1.80E-06	**4.65E-08**	**2.04E-07**
HAP, POM	Dibenzo(a,h)anthracene	53-70-3	1.20E-06	**3.10E-08**	**1.36E-07**
HAP, POM	Fluoranthene	206-44-0	3.00E-06	**7.75E-08**	**3.39E-07**
HAP, POM	Fluorene	86-73-7	2.80E-06	**7.23E-08**	**3.17E-07**
HAP, POM	Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-06	**4.65E-08**	**2.04E-07**
HAP, POM	Phenanthrene	85-01-8	1.70E-05	**4.39E-07**	**1.92E-06**
HAP, POM	Pyrene	129-00-0	5.00E-06	**1.29E-07**	**5.66E-07**
HAP, POM	Total POM		8.82E-05	**2.28E-06**	**9.98E-06**
	Total HAPs			**4.88E-02**	**2.14E-01**

[1] Emission factors taken from "Compilation of Air Pollutant Emission Factors", AP-42, 5th Edition, Tables 1.4-1, -2, -3 & -4, 7/

Potential Emissions = (Emis. factor, lb/10^6 scf) x (CF/hr) / 10^6 = lb/hr (lb/hr) x 8760 hr/yr / 2000 lb/ton = ton/yr

CSG - GW
Particulate Sources

				Control Efficiency			Emission Factors				
Emission Unit	Name	Unit Capacity	Capacity Units/hour	Capture Efficiency	PM Control Efficiency	PM10/PM2.5 Control Efficiency	PM (lb/units)	PM10/PM2.5 (lb/units)	Pb (lb/units)	Sb (lb/units)	Ni (lb/units)
EU058	Foundry Wheelblast	0.025	1000 lbs abrasive	100%	99%	93%	0.69	0.69	0	0	0
EU061	Wheelabrator	0.025	1000 lbs abrasive	100%	99%	93%	0.69	0.69	0	0	0
EU064	Sand Silo #1	2.02	tons sand	100%	99%	93%	0.029	0.029	0	0	0
EU091	Shot Saw	0.475	tons granite	100%	25%	25%	0.003	0.0012	0	0	0
EU092	Shot Saw	0.475	tons granite	100%	25%	25%	0.003	0.0012	0	0	0
EU099	Sand Silo #2	2.02	tons sand	100%	99%	93%	0.029	0.029	0	0	0
EU100	Sand Silo #3	2.02	tons sand	100%	99%	93%	0.029	0.029	0	0	0
EU101	Sand Silo #4	2.02	tons sand	100%	99%	93%	0.029	0.029	0	0	0
EU102	Sand Silo #5	2.02	tons sand	100%	99%	93%	0.029	0.029	0	0	0
EU104	Shot Saw	0.475	tons granite	100%	25%	25%	0.003	0.0012	0	0	0
EU105	Shot Saw	0.475	tons granite	100%	25%	25%	0.003	0.0012	0	0	0
EU106	Shot Saw	0.475	tons granite	100%	25%	25%	0.003	0.0012	0	0	0
EU107	Shot Saw	0.475	tons granite	100%	25%	25%	0.003	0.0012	0	0	0
EU108	Shot Saw	0.475	tons granite	100%	25%	25%	0.003	0.0012	0	0	0
EU109	Shot Saw	0.475	tons granite	100%	25%	25%	0.003	0.0012	0	0	0

Total

Uncontrolled Emissions										Controlled Emissions			
PM	PM10/PM2.5	Pb	Sb	Ni	PM	PM10/PM2.5	Pb	Sb	Ni	PM	PM10/PM2.5	PM	PM10/PM2.5
(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(lb/hr)	(lb/hr)	(ton/yr)	(ton/yr)
0.02	0.02	0.0000	0.0000	0.0000	0.08	0.08	0.0000	0.0000	0.0000	0.000	0.001	0.001	0.005
0.02	0.02	0.0000	0.0000	0.0000	0.08	0.08	0.0000	0.0000	0.0000	0.000	0.001	0.001	0.005
0.06	0.06	0.0000	0.0000	0.0000	0.26	0.26	0.0000	0.0000	0.0000	0.001	0.004	0.003	0.018
0.00	0.00	0.0000	0.0000	0.0000	0.01	0.00	0.0000	0.0000	0.0000	0.001	0.000	0.005	0.002
0.00	0.00	0.0000	0.0000	0.0000	0.01	0.00	0.0000	0.0000	0.0000	0.001	0.000	0.005	0.002
0.06	0.06	0.0000	0.0000	0.0000	0.26	0.26	0.0000	0.0000	0.0000	0.001	0.004	0.003	0.018
0.06	0.06	0.0000	0.0000	0.0000	0.26	0.26	0.0000	0.0000	0.0000	0.001	0.004	0.003	0.018
0.06	0.06	0.0000	0.0000	0.0000	0.26	0.26	0.0000	0.0000	0.0000	0.001	0.004	0.003	0.018
0.06	0.06	0.0000	0.0000	0.0000	0.26	0.26	0.0000	0.0000	0.0000	0.001	0.004	0.003	0.018
0.00	0.00	0.0000	0.0000	0.0000	0.01	0.00	0.0000	0.0000	0.0000	0.001	0.000	0.005	0.002
0.00	0.00	0.0000	0.0000	0.0000	0.01	0.00	0.0000	0.0000	0.0000	0.001	0.000	0.005	0.002
0.00	0.00	0.0000	0.0000	0.0000	0.01	0.00	0.0000	0.0000	0.0000	0.001	0.000	0.005	0.002
0.00	0.00	0.0000	0.0000	0.0000	0.01	0.00	0.0000	0.0000	0.0000	0.001	0.000	0.005	0.002
0.00	0.00	0.0000	0.0000	0.0000	0.01	0.00	0.0000	0.0000	0.0000	0.001	0.000	0.005	0.002
0.00	0.00	0.0000	0.0000	0.0000	0.01	0.00	0.0000	0.0000	0.0000	0.001	0.000	0.005	0.002
					1.48	1.45	0.00	0.00	0.00				

Cold Spring Granite Company
Granite West Insignificant Actvities List - Non Heaters

MPCA No.	Location	Description of Activity	MPCA Rule Citation	Bldg. No.	Fugitive PM10/PM2.5 (lb/hr)	S/V No.	Stack/ Vent PM10/ PM2.5 (lb/hr)	Total PM10 / PM2.5 (lb/hr)	Total PM10 / PM2.5 (ton/yr)	VOC (lb/hr)	VOC (ton/yr)	Xylene (lb/hr)	Xylene (ton/yr)	Ethylbenzene (lb/hr)	Ethylbenzene (ton/yr)	MIBK (lb/hr)	MIBK (ton/yr)	Total HAP (tpy)
IA 28	GW	WA 001 DC 058 Dust Collector for Wheelabrator vented inside 100% of the time	MR 7008.4110	G1	0.032			0.032	0.14									
IA 29	GW	WA 004 Tosca Shotblast & DC 069 Dust Collector vented inside 100% of the time	MR 7008.4110	G1	0.0399			0.0399	0.17									
IA 30	GW	Vantage Line - Tenax	MR 7007.1300, subp. 3(I)	G1	0			0	0.00	0.14	0.59							
IA 169	GW	DC 027 portable dust collector vented inside - pneumatic rock dril	MR 7008.4110	G1	0.000162			0.000162	0.00									
IA 172	GW	DC 040 portable dust collector vented inside - hand cutte	MR 7008.4110	G1	0.000162			0.000162	0.00									
IA 174	GW	DC 031 portable dust collector vented inside	MR 7008.4110	G1	0.000162			0.000162	0.00									
IA 177	GW	DC 063 portable dust collector vented inside - hand cutte	MR 7008.4110	G1	0.000162			0.000162	0.00									
	GW	Portable dust collector vented inside	MR 7008.4110	G1	0.000162			0.000162	0.00									
	GW	Portable dust collector vented inside	MR 7008.4110	G1	0.000162			0.000162	0.00									
IA 222	GW	DC 050 Sample Shop	MR 7008.4110	G1	0.000162			0.000162	0.00									
	GW	Portable dust collector vented inside	MR 7008.4110	G1	0.000162			0.000162	0.00									
	GW	Portable dust collector vented inside	MR 7008.4110	G1	0.000162			0.000162	0.00									
IA 181	GW	WE 002 Miter Saw controlled by dust collector vented indoors	MR 7008.4110	G1	0.0177			0.0177	0.08									
IA 182	GW	WE 020 Miter Saw controlled by dust collector DC 033 vented indoors	MR 7008.4110	G1	0.0177			0.0177	0.08									
IA 183	GW	WE 006 Miter Saw controlled by dust collector DC 031 vented indoors	MR 7008.4110	G1	0.0177			0.0177	0.08									
IA 184	GW	WE 003 Miter Saw controlled by dust collector DC 035 vented indoors	MR 7008.4110	G1	0.0177			0.0177	0.08									
IA 185	GW	Miter Saw controlled by dust collector vented indoors	MR 7008.4110	G1	0.0177			0.0177	0.08									
	GW	Sandblast booth controlled by dust collector vented inside 100% of the tim	MR 7008.4110	G1	0.0009			0.0009	0.00									
IA 40	SS	Lime Silo AG 001	MR 7007.1300, subp. 3(I)	G2		N/A	0.0108	0.0108	0.05									
EU027/028	SS	6 Splitters (Relocated from Granite South)	MR 7007.1300, subp. 3(I)	G2	0.043	SV 009/010	0.012	0.055	0.24									
IA 51	MW	2 Rock Conveyors	MR 7007.1300, subp. 3(I)	G3	0.0022			0.0022	0.01									
IA 178	MW	Sandblast SB 010 controlled by DC 067 dust collector vented inside	MR 7008.4110	G3	0.0009			0.0009	0.00									
IA 178A	MW	Sandblast SB 011 controlled by DC 068 dust collector vented inside	MR 7008.4110	G3	0.0009			0.0009	0.00									
IA 187	MW	WE 001 Miter Saw controlled by dust collector DC 012 vented indoors	MR 7008.4110	G3	0.0177			0.0177	0.08									
IA 188	MW	WE 002 Miter Saw controlled by dust collector DC 014 vented indoors	MR 7008.4110	G3	0.0177			0.0177	0.08									
IA 189	MW	WE 003 Miter Saw controlled by dust collector DC 013 vented indoors	MR 7008.4110	G3	0.0177			0.0177	0.08									
IA 190	MW	WE 004 Miter Saw controlled by dust collector vented indoors	MR 7008.4110	G3	0.0177			0.0177	0.08									
IA 191	MW	WE 016 Miter Saw controlled by dust collector DC 010 vented indoors	MR 7008.4110	G3	0.0177			0.0177	0.08									
IA 192	MW	WE 018 Miter Saw controlled by dust collector vented indoors	MR 7008.4110	G3	0.0177			0.0177	0.08									
IA 193	MW	WE 019 Miter Saw controlled by dust collector DC 015 vented indoors	MR 7008.4110	G3	0.0177			0.0177	0.08									
IA 194	MW	WE 026 Miter Saw controlled by dust collector DC 011 vented indoors	MR 7008.4110	G3	0.0177			0.0177	0.08									
IA 195	MW	DC 056 Dust Collector Schubert	MR 7008.4110	G3	0.0009			0.0009	0.00									
IA 196	MW	DC 057 Dust Collector Schubert	MR 7008.4110	G3	0.0009			0.0009	0.00									
IA 197	MW	DC 071 Dust Collector Schubert	MR 7008.4110	G3	0.0009			0.0009	0.00									
IA 198	MW	DC 052 Dust Collector Hand Carving Area	MR 7008.4110	G3	0.00036			0.00036	0.00									
IA 199	MW	DC 053 Dust Collector Hand Carving Area	MR 7008.4110	G3	0.00036			0.00036	0.00									
IA 200	MW	DC 252 Dust Collector Hand Carving Area	MR 7008.4110	G3	0.00036			0.00036	0.00									
IA 202	MW	DC 051 Dust Collector Hand Carving Area	MR 7008.4110	G3	0.00036			0.00036	0.00									
IA 203	MW	DC 042 (old DC 061) Dust Collector Hand Carving Area	MR 7008.4110	G3	0.00036			0.00036	0.00									
IA 204	MW	DC 0043 - 4 Hand Chipping Stations controlled by Torit Environmental Booths DC 043 vented inside 100%	MR 7008.4110	G3	0.0036			0.0036	0.02									
IA 61	FNDRY	DP 009 Pattern Shop Drill Press	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 62	FNDRY	DP 010 Pattern Shop Drill Press	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 63	FNDRY	GA 027 Pattern Shop Grinding Station	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 64	FNDRY	GA 028 Pattern Shop Grinding Station	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 65	FNDRY	BS 012 Pattern Shop Belt Sander Grizzly Mode	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 66	FNDRY	BS 014 Pattern Shop Belt Sander	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 67	FNDRY	BS 027 Pattern Shop Belt Sander	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 68	FNDRY	BW 002 Pattern Shop Weld Table	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 69	FNDRY	MM 005 Pattern Shop Milling Machine (Gerber)	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 70	FNDRY	WE 007 Pattern Shop Table Saw	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 71	FNDRY	BW 004 Pattern Shop Band Saw	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 72	FNDRY	Pattern Shop Performex Planer/Barrel Sander	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 73	FNDRY	Pattern Shop Work Table Hood	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 75	FNDRY	LP 003 Pattern Shop Wash Cabinet	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
IA 74	FNDRY	PS 003 Pattern Shop Paint Hood	MR 7007.1300, subp. 3(I)	G4	0.0138	SV 034	0.00055	0.01435	0.06									
IA 78	FNDRY	HP 001 Bulk Bag Unloading Station	MR 7007.1300, subp. 3(I)	G4	0	SV 034	0.004	0.004	0.02									
IA 79	FNDRY	SB 036 Manual Sandblast Cabinet	MR 7007.1300, subp. 3(I)	G4	0	SV 034	0.013	0.013	0.06									
IA 80	FNDRY	BS 013 Trimming Belt Sander	MR 7007.1300, subp. 3(I)	G4	0.0243	SV 034	0.00097	0.02527	0.11									
IA 81	FNDRY	BS 023 Trimming Band Saw	MR 7007.1300, subp. 3(I)	G4	0.0243	SV 034	0.00097	0.02527	0.11									
IA 82	FNDRY	BS 024 Trimming Disk Sander	MR 7007.1300, subp. 3(I)	G4	0.0243	SV 034	0.00097	0.02527	0.11									
IA 83	FNDRY	MM 001 CNC Woodworking Milling Machine	MR 7007.1300, subp. 3(I)	G4	0.00013	SV 034	0.000006	0.000136	0.00									
	FNDRY	WL 008 Welding Table Pattern Making	MR 7007.1300, subp. 3(H)(3)	G4	0.024	SV 034	0.007	0.031	0.14									
	FNDRY	WL 004 Portable Arc Welder	MR 7007.1300, subp. 3(H)(3)	G4	0.031			0.031	0.14									
IA 178B	FNDRY	Sandblast SB 024 controlled by DC 022 dust collector vented inside 100% of the time	MR 7008.4110	G4	0.0009			0.0009	0.00									
	FNDRY	Sand Silo	MR 7007.1300, subp. 3(1)	G4	0.004			0.004	0.02									
	FNDRY	HD Engraver	MR 7007.1300, subp. 3(I)	G4	0.047			0.047	0.21									
IA 112	STC	WS 079 Wire Saw Wall Exhaust	MR 7007.1300, subp. 3(I)	G6	0.00717			0.00717	0.03									
IA 113	STC	WS 080 Wire Saw Wall Exhaust	MR 7007.1300, subp. 3(I)	G6	0.00717			0.00717	0.03									
IA 114	STC	WS 081 Wire Saw Wall Exhaust	MR 7007.1300, subp. 3(I)	G6	0.00717			0.00717	0.03									
IA 115	STC	WS 082 Wire Saw Wall Exhaust	MR 7007.1300, subp. 3(I)	G6	0.00717			0.00717	0.03									
IA 116	STC	WS 083 Wire Saw Wall Exhaust	MR 7007.1300, subp. 3(I)	G6	0.00717			0.00717	0.03									
IA 117	STC	WS 084 Wire Saw Wall Exhaust	MR 7007.1300, subp. 3(I)	G6	0.00717			0.00717	0.03									
	Water Reclaim	WL 023 Portable Acethylene Welder	MR 7007.1300, subp. 3(H)(3)	G7	0.031			0.031	0.14									
	Water Reclaim	WL 024 Portable ArcWelder	MR 7007.1300, subp. 3(H)(3)	G7	0.031			0.031	0.14									
IA 167	Support Servs	PA 0009 - Diamond Dept Core Drill Bit Painting	MR 7007.1300, subp. 3(I)	G8	0.632		0.158	0.79	3.46	0.67	2.93	0.0638	0.2792	0.0079	0.0347	0.1300	0.5691	
	Support Servs	DC 0078 - BS 0036 Planer vented inside 100% of time	MR 7008.4110	G8	0.0177			0.0177	0.08									
	Support Servs	WE 0015 Miter Saw (not vented)	MR 7007.1300, subp. 3(I)	G8	0.0177				0.00									
	Support Servs	DC 0078 - WE 0014 Miter Saw vented inside 100% of time	MR 7008.4110	G8	0.0177			0.0177	0.08									
	Support Servs	DC 0078 - WE 0102 Radial Arm Saw vented inside 100% of time	MR 7008.4110	G8	0.0177			0.0177	0.08									
	Support Servs	DC 0078 - WE 0013 Table Saw vented inside 100% of time	MR 7008.4110	G8	0.0177			0.0177	0.08									
	Support Servs	DC 0078 - BS 0030 Belt Sander vented inside 100% of time	MR 7008.4110	G8	0.0177			0.0177	0.08									
	Support Servs	Silver Soldering (Diamond Segment - Cabinet 3	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14									
	Support Servs	Silver Soldering (Carbide Tool	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14									
	Support Servs	Work Table (Vise)	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14									
	Support Servs	WL 005 Taylor Windield 3 Pahse 440	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14									
	Support Servs	WL 006 Sea Welder V230	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14									

	Support Servs	2 Oxy Acetylene Torch (stripping segments	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14											
	Support Servs	WL 012 Miller Welder	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14											
	Support Servs	WL 013 Miller A.C. Arc Welder	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14											
	Support Servs	WL 014 Miller Deltaweld 450	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14											
	Support Servs	WL 015 Miller Welder	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14											
	Support Servs	WL 016 Miller Welder	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14											
	Support Servs	WL 017 Parkmaster XL Plus	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14											
	Support Servs	WL 018 Millermatic 250	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14											
	Support Servs	WL 019 Torpedo DC	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14											
	Support Servs	WL 020 Torpedo DC	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14											
	Support Servs	3 Oxy-Acetylene Torches	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14											
	Support Servs	TH 001 Pattern Oxy-Acetylene Torch	MR 7007.1300, subp. 3(H)(3)	G8	0.024	SV 045	0.007	0.031	0.14											
	Support Servs	PW 0018 & PW 0019 - Nickel Stripper Tanks	MR 7007.1300, subp. 3(I)	G8	0	SV 045	0	0	0.00											
		Unpaved Plant Roads	MR 7007.1300, subp. 3(J)																	
		Parking Lots	MR 7007.1300, subp. 3(J)																	
	GW = Granite West Bldg.		**Sum**					**2.12**	**9.27**	**0.8100**	**3.5200**	**0.0638**	**0.2792**	**0.0079**	**0.0347**	**0.1300**	**0.5691**	0.8830		
	SS = Shot Saw Bldg.																			
	MW = Monuwest Bldg.																			
	FNDRY = Foundry Bldg.																			
	Plate Storage = Plate Storage Bldg																			
	STC = Slab Tech Center																			
	Water Treatment = Water Treatment / Reclaim Bldg.																			
	Support Servs = Maintenance / Welding / Diamond Dept./ Carpenter Shop / Engineering Bldg																			

Total IA

	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_X	CO	VOC	Benzene	Ethylbenzene	Toluene	MIBK
Combustion	0.91	0.91	0.91	0.07	16.88	9.74	1.30	2.38E-04	0	3.85E-04	
PM	1.48	1.45	1.45								
Non-heaters	9.27	9.27	9.27				3.52		0.0347		0.5691
Total IA	11.66	11.63	11.63	0.07	16.88	9.74	4.82	0.00	0.03	0.00	0.57

xylene	HAP Total	CO_2e
0	2.14E-01	16595.19
0.2792	0.883	
0.28	1.10	16595.19

Facility: Cold Spring Granite Co
Facility ID: 14500067
Inventory Year: 2010

Unit ID	Unit Desc	Process ID	Proc Desc	SCC	Pollutant	Emissions Calculation Method	Throughput Material	Throughput Amount	Throughput Units	Emission Factor	EF Units	Capt (%)	Cont (%)	Total Comb (%)	Emissions	Original Emissions	Emiss Units
EU003	M & W Paint Booth (DC034)	EU003PD001	Paint	40200101	PM	MAT BALANCE	COATING	279.00	GAL	1.117E+0	LB/GAL	80	85	85	0.04986	0.04986	TON
EU003	M & W Paint Booth (DC034)	EU003PD001	Paint	40200101	PM10-PRI	MAT BALANCE	COATING	279.00	GAL	1.117E+0	LB/GAL	80	85	85	0.04986	0.04986	TON
EU003	M & W Paint Booth (DC034)	EU003PD001	Paint	40200101	VOC	MAT BALANCE	COATING	279.00	GAL	4.150E+0	LB/GAL				0.5789	0.5789	TON
EU010	Main Sandblast Booth #1 (SB029)	EU010PD001	Sandblasting	30900202	PM	OTHER EF CE	ABRASIVE	26.00	TON	1.820E+2	LB/TON	100	99	99	0.02366	0.02366	TON
EU010	Main Sandblast Booth #1 (SB029)	EU010PD001	Sandblasting	30900202	PM10-PRI	OTHER EF CE	ABRASIVE	26.00	TON	2.600E+1	LB/TON	100	93	93	0.02366	0.02366	TON
EU029	Granite South Tumbler (DC006)	EU029PD001	Tumbler	30588801	PM	OTHER EF CE	PRODUCT	54.00	TON	6.600E+1	LB/TON	100	99	99	0.01782	0.01782	TON
EU029	Granite South Tumbler (DC006)	EU029PD001	Tumbler	30588801	PM10-PRI	OTHER EF CE	PRODUCT	54.00	TON	3.500E+0	LB/TON	100	93	93	0.006615	0.006615	TON
EU054	Monuwest Finishing Operations (North DC021)	EU054PD001	Dust collector-Markers	30488801	PM	OTHER EF CE	ABRASIVE	62.00	TON	1.820E+2	LB/TON	100	99	99	0.05642	0.05642	TON
EU054	Monuwest Finishing Operations (North DC021)	EU054PD001	Dust collector-Markers	30488801	PM10-PRI	OTHER EF CE	ABRASIVE	62.00	TON	2.600E+1	LB/TON	100	93	93	0.05642	0.05642	TON
EU054	Monuwest Finishing Operations (North DC021)	EU054PD003	Hand polishing	30488801	PM	OTHER EF CE	PRODUCT	15,977.00	TON	1.152E+0	LB/TON	100	99	99	0.09203	0.09203	TON
EU054	Monuwest Finishing Operations (North DC021)	EU054PD003	Hand polishing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	15,977.00	TON	1.152E+0	LB/TON	100	93	93	0.6442	0.6442	TON
EU055	Monuwest Finishing Operations (West DC020)	EU055PD001	Hand polishing	30488801	PM	OTHER EF CE	PRODUCT	15,977.00	TON	1.152E+0	LB/TON	80	99	99	1.914	1.914	TON
EU055	Monuwest Finishing Operations (West DC020)	EU055PD001	Hand polishing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	15,977.00	TON	1.152E+0	LB/TON	80	93	93	2.356	2.356	TON
EU055	Monuwest Finishing Operations (West DC020)	EU055PD003	Splitting	30502003	PM	OTHER EF CE	RAW MATERIAL	31,955.00	TON	5.400E-3	LB/TON	80	99	99	0.01795	0.01795	TON
EU055	Monuwest Finishing Operations (West DC020)	EU055PD003	Splitting	30502003	PM10-PRI	OTHER EF CE	RAW MATERIAL	31,955.00	TON	5.400E-3	LB/TON	80	93	93	0.02209	0.02209	TON
EU056	Shot Saw (SS001)	EU056PD001	Sawing	30488801	PM	OTHER EF CE	PRODUCT	792.00	TON	3.000E-3	LB/TON	100	20	20	0.0009504	0.0009504	TON
EU056	Shot Saw (SS001)	EU056PD001	Sawing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	792.00	TON	1.200E-3	LB/TON	100	20	20	0.0003802	0.0003802	TON
EU057	Foundry Paint Booth (DC036)	EU057PD001	Paint	40200101	PM	MAT BALANCE	COATING	1,856.00	GAL	7.330E-1	LB/GAL	80	85	85	0.2177	0.2177	TON
EU057	Foundry Paint Booth (DC036)	EU057PD001	Paint	40200101	PM10-PRI	MAT BALANCE	COATING	1,856.00	GAL	7.330E-1	LB/GAL	80	85	85	0.2177	0.2177	TON
EU057	Foundry Paint Booth (DC036)	EU057PD001	Paint	40200101	VOC	MAT BALANCE	COATING	1,856.00	GAL	4.407E+0	LB/GAL				4.09	4.09	TON
EU058	Foundry Sand Blast Booth (WA002)	EU058PD001	Shotblasting	30900202	PM	USEPA EF CE	ABRASIVE	8.00	TON	5.500E+1	LB/TON	100	99	99	0.0022	0.0022	TON
EU058	Foundry Sand Blast Booth (WA002)	EU058PD001	Shotblasting	30900202	PM10-PRI	USEPA EF CE	ABRASIVE	8.00	TON	1.300E+1	LB/TON	100	93	93	0.00364	0.00364	TON
EU059	Foundry Mold Shakeout (MS002)	EU059PD001	Bronze poured	30400331	PM	OTHER EF CE	METAL	1,520.00	TON	3.200E+0	LB/TON	80	99	99	0.5059	0.5059	TON
EU059	Foundry Mold Shakeout (MS002)	EU059PD001	Bronze poured	30400331	PM10-PRI	OTHER EF CE	METAL	1,520.00	TON	2.240E+0	LB/TON	80	93	93	0.4358	0.4358	TON
EU059	Foundry Mold Shakeout (MS002)	EU059PD001	Bronze poured	30400331	VOC	USEPA EF NCE	METAL	1,520.00	TON	1.200E+0	LB/TON				0.912	0.912	TON
EU060	Foundry Induction Furnace #1 (FR008)	EU060PD001	Bronze melt	30400224	LEAD	OTHER EF NCE	CHARGE	380.00	TON	2.500E-2	LB/TON				0.00475	0.00475	TON
EU060	Foundry Induction Furnace #1 (FR008)	EU060PD001	Bronze melt	30400224	PM	OTHER EF CE	CHARGE	380.00	TON	9.860E-1	LB/TON	80	99	99	0.03897	0.03897	TON
EU060	Foundry Induction Furnace #1 (FR008)	EU060PD001	Bronze melt	30400224	PM10-PRI	OTHER EF CE	CHARGE	380.00	TON	9.420E-1	LB/TON	80	93	93	0.04582	0.04582	TON
EU060	Foundry Induction Furnace #1 (FR008)	EU060PD001	Bronze melt	30400224	SO2	USEPA EF NCE	CHARGE	380.00	TON	3.000E-2	LB/TON				0.0057	0.0057	TON
EU061	Foundry Wheelabrator #1 (WA003)	EU061PD001	Grinding	30400340	PM	USEPA EF CE	METAL	8.00	TON	1.700E+1	LB/TON	100	99	99	0.00068	0.00068	TON
EU061	Foundry Wheelabrator #1 (WA003)	EU061PD001	Grinding	30400340	PM10-PRI	USEPA EF CE	METAL	8.00	TON	1.700E+0	LB/TON	100	93	93	0.000476	0.000476	TON
EU063	Foundry Sand Mixer #1 (SM002)	EU063PD001	Sand handling	30400350	PM	USEPA EF CE	SAND	7,468.00	TON	3.600E+0	LB/TON	80	99	99	2.796	2.796	TON
EU063	Foundry Sand Mixer #1 (SM002)	EU063PD001	Sand handling	30400350	PM10-PRI	USEPA EF CE	SAND	7,468.00	TON	5.400E-1	LB/TON	80	93	93	0.5162	0.5162	TON
EU064	Foundry Sand Silo #1	EU064PD001	Sand storage	30502503	PM	USEPA EF CE	PRODUCT	3,184.00	TON	2.900E-2	LB/TON	80	99	99	0.009603	0.009603	TON
EU064	Foundry Sand Silo #1	EU064PD001	Sand storage	30502503	PM10-PRI	USEPA EF CE	PRODUCT	3,184.00	TON	6.400E-3	LB/TON	80	93	93	0.002608	0.002608	TON
EU066	Foundry Bronze Pouring (CV032) and Cooling (CV053)	EU066PD001	Bronze melt	30400318	PM	OTHER EF CE	METAL	1,520.00	TON	4.600E+0	LB/TON	80	99	99	0.7272	0.7272	TON
EU066	Foundry Bronze Pouring (CV032) and Cooling (CV053)	EU066PD001	Bronze melt	30400318	PM10-PRI	OTHER EF CE	METAL	1,520.00	TON	2.256E+0	LB/TON	80	93	93	0.4389	0.4389	TON
EU068	Foundry Induction Furnace #2 (FR009)	EU068PD001	Metal melted	30400224	LEAD	OTHER EF NCE	CHARGE	380.00	TON	2.500E-2	LB/TON				0.00475	0.00475	TON
EU068	Foundry Induction Furnace #2 (FR009)	EU068PD001	Metal melted	30400224	PM	OTHER EF CE	CHARGE	380.00	TON	9.860E-1	LB/TON	80	99	99	0.03897	0.03897	TON
EU068	Foundry Induction Furnace #2 (FR009)	EU068PD001	Metal melted	30400224	PM10-PRI	OTHER EF CE	CHARGE	380.00	TON	9.420E-1	LB/TON	80	93	93	0.04582	0.04582	TON
EU068	Foundry Induction Furnace #2 (FR009)	EU068PD001	Metal melted	30400224	SO2	USEPA EF NCE	CHARGE	380.00	TON	3.000E-2	LB/TON				0.0057	0.0057	TON
EU069	Foundry Induction Furnace #3 (FR010)	EU069PD001	Metal melted	30400224	LEAD	OTHER EF NCE	CHARGE	380.00	TON	2.500E-2	LB/TON				0.00475	0.00475	TON
EU069	Foundry Induction Furnace #3 (FR010)	EU069PD001	Metal melted	30400224	PM	OTHER EF CE	CHARGE	380.00	TON	9.860E-1	LB/TON	80	99	99	0.03897	0.03897	TON
EU069	Foundry Induction Furnace #3 (FR010)	EU069PD001	Metal melted	30400224	PM10-PRI	OTHER EF CE	CHARGE	380.00	TON	9.420E-1	LB/TON	80	93	93	0.04582	0.04582	TON

EU069	Foundry Induction Furnace #3 (FR010)	EU069PD001	Metal melted	30400224	SO2	USEPA EF NCE	CHARGE	380.00	TON	3.000E-2	LB/TON				0.0057	0.0057	TON
EU070	Foundry Induction Furnace #4 (FR011)	EU070PD001	Metal melted	30400224	LEAD	OTHER EF NCE	CHARGE	380.00	TON	2.500E-2	LB/TON				0.00475	0.00475	TON
EU070	Foundry Induction Furnace #4 (FR011)	EU070PD001	Metal melted	30400224	PM	OTHER EF CE	CHARGE	380.00	TON	9.860E-1	LB/TON	80	99	99	0.03897	0.03897	TON
EU070	Foundry Induction Furnace #4 (FR011)	EU070PD001	Metal melted	30400224	PM10-PRI	OTHER EF CE	CHARGE	380.00	TON	9.420E-1	LB/TON	80	93	93	0.04582	0.04582	TON
EU070	Foundry Induction Furnace #4 (FR011)	EU070PD001	Metal melted	30400224	SO2	USEPA EF NCE	CHARGE	380.00	TON	3.000E-2	LB/TON				0.0057	0.0057	TON
EU088	Granite West Shot Saw (SS002)	EU088PD001	Sawing	30488801	PM	OTHER EF CE	PRODUCT	792.00	TON	3.000E-3	LB/TON	100	99	99	0.00001188	0.00001188	TON
EU088	Granite West Shot Saw (SS002)	EU088PD001	Sawing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	792.00	TON	1.200E-3	LB/TON	100	93	93	0.00003326	0.00003326	TON
EU089	Granite West Shot Saw (SS003)	EU089PD001	Sawing	30488801	PM	OTHER EF CE	PRODUCT	792.00	TON	3.000E-3	LB/TON	100	99	99	0.00001188	0.00001188	TON
EU089	Granite West Shot Saw (SS003)	EU089PD001	Sawing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	792.00	TON	1.200E-3	LB/TON	100	93	93	0.00003326	0.00003326	TON
EU090	Granite West Shot Saw (SS004)	EU090PD001	Sawing	30488801	PM	OTHER EF CE	PRODUCT	792.00	TON	3.000E-3	LB/TON	100	99	99	0.00001188	0.00001188	TON
EU090	Granite West Shot Saw (SS004)	EU090PD001	Sawing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	792.00	TON	1.200E-3	LB/TON	100	93	93	0.00003326	0.00003326	TON
EU091	Granite West Shot Saw (SS005)	EU091PD001	Sawing	30488801	PM	OTHER EF CE	PRODUCT	792.00	TON	3.000E-3	LB/TON	100	99	99	0.00001188	0.00001188	TON
EU091	Granite West Shot Saw (SS005)	EU091PD001	Sawing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	792.00	TON	1.200E-3	LB/TON	100	93	93	0.00003326	0.00003326	TON
EU092	Granite West Shot Saw (SS006)	EU092PD001	Sawing	30488801	PM	OTHER EF CE	PRODUCT	792.00	TON	3.000E-3	LB/TON	100	99	99	0.00001188	0.00001188	TON
EU092	Granite West Shot Saw (SS006)	EU092PD001	Sawing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	792.00	TON	1.200E-3	LB/TON	100	93	93	0.00003326	0.00003326	TON
EU094	Monuwest Generator	EU094PD001	Emergency-diesel	20200102	CO	USEPA EF NCE	DIESEL FUEL	.37	E3GAL	1.300E+2	LB/E3GAL				0.02405	0.02405	TON
EU094	Monuwest Generator	EU094PD001	Emergency-diesel	20200102	NOX	USEPA EF NCE	DIESEL FUEL	.37	E3GAL	6.040E+2	LB/E3GAL				0.1117	0.1117	TON
EU094	Monuwest Generator	EU094PD001	Emergency-diesel	20200102	PM	USEPA EF NCE	DIESEL FUEL	.37	E3GAL	4.250E+1	LB/E3GAL				0.007863	0.007863	TON
EU094	Monuwest Generator	EU094PD001	Emergency-diesel	20200102	PM10-PRI	USEPA EF NCE	DIESEL FUEL	.37	E3GAL	4.250E+1	LB/E3GAL				0.007863	0.007863	TON
EU094	Monuwest Generator	EU094PD001	Emergency-diesel	20200102	SO2	USEPA EF NCE	DIESEL FUEL	.37	E3GAL	3.970E+1	LB/E3GAL				0.007345	0.007345	TON
EU094	Monuwest Generator	EU094PD001	Emergency-diesel	20200102	VOC	USEPA EF NCE	DIESEL FUEL	.37	E3GAL	4.930E+1	LB/E3GAL				0.009121	0.009121	TON
EU095	Foundry Sand Reclaim VibraMill #2 (VM002)	EU095PD001	Sand reclaim	30400350	PM	USEPA EF CE	SAND	12,736.00	TON	3.600E+0	LB/TON	80	99	99	4.768	4.768	TON
EU095	Foundry Sand Reclaim VibraMill #2 (VM002)	EU095PD001	Sand reclaim	30400350	PM10-PRI	USEPA EF CE	SAND	12,736.00	TON	5.400E-1	LB/TON	80	93	93	0.8803	0.8803	TON
EU097	Foundry Sand Mixer #2 (SM005)	EU097PD001	Sand handling	30400350	PM	USEPA EF CE	SAND	7,468.00	TON	3.600E+0	LB/TON	80	99	99	2.796	2.796	TON
EU097	Foundry Sand Mixer #2 (SM005)	EU097PD001	Sand handling	30400350	PM10-PRI	USEPA EF CE	SAND	7,468.00	TON	5.400E-1	LB/TON	80	93	93	0.5162	0.5162	TON
EU099	Foundry Sand Silo #2 (SA002)	EU099PD001	Sand storage	30502503	PM	USEPA EF CE	PRODUCT	3,184.00	TON	2.900E-2	LB/TON	80	99	99	0.009603	0.009603	TON
EU099	Foundry Sand Silo #2 (SA002)	EU099PD001	Sand storage	30502503	PM10-PRI	USEPA EF CE	PRODUCT	3,184.00	TON	6.400E-3	LB/TON	80	93	93	0.002608	0.002608	TON
EU101	Foundry Sand Silo #4 (SA002)	EU101PD001	Sand storage	30502503	PM	USEPA EF CE	PRODUCT	3,184.00	TON	2.900E-2	LB/TON	80	99	99	0.009603	0.009603	TON
EU101	Foundry Sand Silo #4 (SA002)	EU101PD001	Sand storage	30502503	PM10-PRI	USEPA EF CE	PRODUCT	3,184.00	TON	6.400E-3	LB/TON	80	93	93	0.002608	0.002608	TON
EU102	Foundry Sand Silo #5 (SA001)	EU102PD001	Sand storage	30502503	PM	USEPA EF CE	PRODUCT	3,184.00	TON	2.900E-2	LB/TON	80	99	99	0.009603	0.009603	TON
EU102	Foundry Sand Silo #5 (SA001)	EU102PD001	Sand storage	30502503	PM10-PRI	USEPA EF CE	PRODUCT	3,184.00	TON	6.400E-3	LB/TON	80	93	93	0.002608	0.002608	TON
EU103	Lacquer Finish Booth (DC049)	EU103PD001	Paint	40200101	PM	MAT BALANCE	COATING	956.00	GAL	1.070E+0	LB/GAL	100	85	85	0.07672	0.07672	TON
EU103	Lacquer Finish Booth (DC049)	EU103PD001	Paint	40200101	PM10-PRI	MAT BALANCE	COATING	956.00	GAL	1.070E+0	LB/GAL	100	85	85	0.07672	0.07672	TON
EU103	Lacquer Finish Booth (DC049)	EU103PD001	Paint	40200101	VOC	MAT BALANCE	COATING	956.00	GAL	4.407E+0	LB/GAL				2.107	2.107	TON
EU104	Granite West Shot Saw (SS007)	EU104PD001	Sawing	30488801	PM	OTHER EF CE	PRODUCT	792.00	TON	3.000E-3	LB/TON	100	20	20	0.0009504	0.0009504	TON
EU104	Granite West Shot Saw (SS007)	EU104PD001	Sawing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	792.00	TON	1.200E-3	LB/TON	100	20	20	0.0003802	0.0003802	TON
EU105	Granite West Shot Saw (SS008)	EU105PD001	Sawing	30488801	PM	OTHER EF CE	PRODUCT	792.00	TON	3.000E-3	LB/TON	100	20	20	0.0009504	0.0009504	TON
EU105	Granite West Shot Saw (SS008)	EU105PD001	Sawing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	792.00	TON	1.200E-3	LB/TON	100	20	20	0.0003802	0.0003802	TON
EU106	Granite West Shot Saw (SS009)	EU106PD001	Sawing	30488801	PM	OTHER EF CE	PRODUCT	792.00	TON	3.000E-3	LB/TON	100	20	20	0.0009504	0.0009504	TON
EU106	Granite West Shot Saw (SS009)	EU106PD001	Sawing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	792.00	TON	1.200E-3	LB/TON	100	20	20	0.0003802	0.0003802	TON
EU107	Granite West Shot Saw (SS010)	EU107PD001	Sawing	30488801	PM	OTHER EF CE	PRODUCT	792.00	TON	3.000E-3	LB/TON	100	20	20	0.0009504	0.0009504	TON
EU107	Granite West Shot Saw (SS010)	EU107PD001	Sawing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	792.00	TON	1.200E-3	LB/TON	100	20	20	0.0003802	0.0003802	TON
EU108	Granite West Shot Saw (SS011)	EU108PD001	Sawing	30488801	PM	OTHER EF CE	PRODUCT	792.00	TON	3.000E-3	LB/TON	100	20	20	0.0009504	0.0009504	TON
EU108	Granite West Shot Saw (SS011)	EU108PD001	Sawing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	792.00	TON	1.200E-3	LB/TON	100	20	20	0.0003802	0.0003802	TON
EU109	Granite West Shot Saw (SS012)	EU109PD001	Sawing	30488801	PM	OTHER EF CE	PRODUCT	792.00	TON	3.000E-3	LB/TON	100	20	20	0.0009504	0.0009504	TON
EU109	Granite West Shot Saw (SS012)	EU109PD001	Sawing	30488801	PM10-PRI	OTHER EF CE	PRODUCT	792.00	TON	1.200E-3	LB/TON	100	20	20	0.0003802	0.0003802	TON
EU110	Shot Saws HE010 MUA North	EU110PD001	Propane	10201002	CO	USEPA EF NCE	PROPANE	7.10	E3GAL	7.500E+0	LB/E3GAL				0.02663	0.02663	TON
EU110	Shot Saws HE010 MUA North	EU110PD001	Propane	10201002	NOX	USEPA EF NCE	PROPANE	7.10	E3GAL	1.300E+1	LB/E3GAL				0.04615	0.04615	TON
EU110	Shot Saws HE010 MUA North	EU110PD001	Propane	10201002	PM	USEPA EF NCE	PROPANE	7.10	E3GAL	7.000E-1	LB/E3GAL				0.002485	0.002485	TON
EU110	Shot Saws HE010 MUA North	EU110PD001	Propane	10201002	PM10-PRI	USEPA EF NCE	PROPANE	7.10	E3GAL	7.000E-1	LB/E3GAL				0.002485	0.002485	TON
EU110	Shot Saws HE010 MUA North	EU110PD001	Propane	10201002	SO2	USEPA EF NCE	PROPANE	7.10	E3GAL	2.000E-2	LB/E3GAL				0.000071	0.000071	TON
EU110	Shot Saws HE010 MUA North	EU110PD001	Propane	10201002	VOC	USEPA EF NCE	PROPANE	7.10	E3GAL	1.000E+0	LB/E3GAL				0.00355	0.00355	TON
EU110	Shot Saws HE010 MUA North	EU110PD002	Natural Gas	10200603	CO	USEPA EF NCE	NATURAL GAS	9.20	E6FT3	8.400E+1	LB/E6FT3				0.3864	0.3864	TON
EU110	Shot Saws HE010 MUA North	EU110PD002	Natural Gas	10200603	NOX	USEPA EF NCE	NATURAL GAS	9.20	E6FT3	1.000E+2	LB/E6FT3				0.46	0.46	TON
EU110	Shot Saws HE010 MUA North	EU110PD002	Natural Gas	10200603	PM	USEPA EF NCE	NATURAL GAS	9.20	E6FT3	7.600E+0	LB/E6FT3				0.03496	0.03496	TON
EU110	Shot Saws HE010 MUA North	EU110PD002	Natural Gas	10200603	PM10-PRI	USEPA EF NCE	NATURAL GAS	9.20	E6FT3	7.600E+0	LB/E6FT3				0.03496	0.03496	TON
EU110	Shot Saws HE010 MUA North	EU110PD002	Natural Gas	10200603	SO2	USEPA EF NCE	NATURAL GAS	9.20	E6FT3	6.000E-1	LB/E6FT3				0.00276	0.00276	TON
EU110	Shot Saws HE010 MUA North	EU110PD002	Natural Gas	10200603	VOC	USEPA EF NCE	NATURAL GAS	9.20	E6FT3	5.500E+0	LB/E6FT3				0.0253	0.0253	TON
EU111	Shot Saws HE011 MUA West	EU111PD001	Propane	10201002	CO	USEPA EF NCE	PROPANE	7.10	E3GAL	7.500E+0	LB/E3GAL				0.02663	0.02663	TON
EU111	Shot Saws HE011 MUA West	EU111PD001	Propane	10201002	NOX	USEPA EF NCE	PROPANE	7.10	E3GAL	1.300E+1	LB/E3GAL				0.04615	0.04615	TON
EU111	Shot Saws HE011 MUA West	EU111PD001	Propane	10201002	PM	USEPA EF NCE	PROPANE	7.10	E3GAL	7.000E-1	LB/E3GAL				0.002485	0.002485	TON
EU111	Shot Saws HE011 MUA West	EU111PD001	Propane	10201002	PM10-PRI	USEPA EF NCE	PROPANE	7.10	E3GAL	7.000E-1	LB/E3GAL				0.002485	0.002485	TON
EU111	Shot Saws HE011 MUA West	EU111PD001	Propane	10201002	SO2	USEPA EF NCE	PROPANE	7.10	E3GAL	2.000E-2	LB/E3GAL				0.000071	0.000071	TON
EU111	Shot Saws HE011 MUA West	EU111PD001	Propane	10201002	VOC	USEPA EF NCE	PROPANE	7.10	E3GAL	1.000E+0	LB/E3GAL				0.00355	0.00355	TON
EU111	Shot Saws HE011 MUA West	EU111PD002	Natural Gas	10200603	CO	USEPA EF NCE	NATURAL GAS	9.20	E6FT3	8.400E+1	LB/E6FT3				0.3864	0.3864	TON
EU111	Shot Saws HE011 MUA West	EU111PD002	Natural Gas	10200603	NOX	USEPA EF NCE	NATURAL GAS	9.20	E6FT3	1.000E+2	LB/E6FT3				0.46	0.46	TON

EU111	Shot Saws HE011 MUA West	EU111PD002	Natural Gas	10200603	PM	USEPA EF NCE	NATURAL GAS	9.20	E6FT3	7.600E+0	LB/E6FT3	0.03496	0.03496 TON
EU111	Shot Saws HE011 MUA West	EU111PD002	Natural Gas	10200603	PM10-PRI	USEPA EF NCE	NATURAL GAS	9.20	E6FT3	7.600E+0	LB/E6FT3	0.03496	0.03496 TON
EU111	Shot Saws HE011 MUA West	EU111PD002	Natural Gas	10200603	SO2	USEPA EF NCE	NATURAL GAS	9.20	E6FT3	6.000E-1	LB/E6FT3	0.00276	0.00276 TON
EU111	Shot Saws HE011 MUA West	EU111PD002	Natural Gas	10200603	VOC	USEPA EF NCE	NATURAL GAS	9.20	E6FT3	5.500E+0	LB/E6FT3	0.0253	0.0253 TON
EU112	Monuwest HE001 MUA South	EU112PD001	Propane	10201002	CO	USEPA EF NCE	PROPANE	4.70	E3GAL	7.500E+0	LB/E3GAL	0.01763	0.01763 TON
EU112	Monuwest HE001 MUA South	EU112PD001	Propane	10201002	NOX	USEPA EF NCE	PROPANE	4.70	E3GAL	1.300E+1	LB/E3GAL	0.03055	0.03055 TON
EU112	Monuwest HE001 MUA South	EU112PD001	Propane	10201002	PM	USEPA EF NCE	PROPANE	4.70	E3GAL	7.000E-1	LB/E3GAL	0.001645	0.001645 TON
EU112	Monuwest HE001 MUA South	EU112PD001	Propane	10201002	PM10-PRI	USEPA EF NCE	PROPANE	4.70	E3GAL	7.000E-1	LB/E3GAL	0.001645	0.001645 TON
EU112	Monuwest HE001 MUA South	EU112PD001	Propane	10201002	SO2	USEPA EF NCE	PROPANE	4.70	E3GAL	2.000E-2	LB/E3GAL	0.000047	0.000047 TON
EU112	Monuwest HE001 MUA South	EU112PD001	Propane	10201002	VOC	USEPA EF NCE	PROPANE	4.70	E3GAL	1.000E+0	LB/E3GAL	0.00235	0.00235 TON
EU112	Monuwest HE001 MUA South	EU112PD002	Natural Gas	10200603	CO	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	8.400E+1	LB/E6FT3	0.399	0.399 TON
EU112	Monuwest HE001 MUA South	EU112PD002	Natural Gas	10200603	NOX	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	1.000E+2	LB/E6FT3	0.475	0.475 TON
EU112	Monuwest HE001 MUA South	EU112PD002	Natural Gas	10200603	PM	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	7.600E+0	LB/E6FT3	0.0361	0.0361 TON
EU112	Monuwest HE001 MUA South	EU112PD002	Natural Gas	10200603	PM10-PRI	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	7.600E+0	LB/E6FT3	0.0361	0.0361 TON
EU112	Monuwest HE001 MUA South	EU112PD002	Natural Gas	10200603	SO2	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	6.000E-1	LB/E6FT3	0.00285	0.00285 TON
EU112	Monuwest HE001 MUA South	EU112PD002	Natural Gas	10200603	VOC	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	5.500E+0	LB/E6FT3	0.02613	0.02613 TON
EU113	Monuwest HE002 MUA Center	EU113PD001	Propane	10201002	CO	USEPA EF NCE	PROPANE	4.70	E3GAL	7.500E+0	LB/E3GAL	0.01763	0.01763 TON
EU113	Monuwest HE002 MUA Center	EU113PD001	Propane	10201002	NOX	USEPA EF NCE	PROPANE	4.70	E3GAL	1.300E+1	LB/E3GAL	0.03055	0.03055 TON
EU113	Monuwest HE002 MUA Center	EU113PD001	Propane	10201002	PM	USEPA EF NCE	PROPANE	4.70	E3GAL	7.000E-1	LB/E3GAL	0.001645	0.001645 TON
EU113	Monuwest HE002 MUA Center	EU113PD001	Propane	10201002	PM10-PRI	USEPA EF NCE	PROPANE	4.70	E3GAL	7.000E-1	LB/E3GAL	0.001645	0.001645 TON
EU113	Monuwest HE002 MUA Center	EU113PD001	Propane	10201002	SO2	USEPA EF NCE	PROPANE	4.70	E3GAL	2.000E-2	LB/E3GAL	0.000047	0.000047 TON
EU113	Monuwest HE002 MUA Center	EU113PD001	Propane	10201002	VOC	USEPA EF NCE	PROPANE	4.70	E3GAL	1.000E+0	LB/E3GAL	0.00235	0.00235 TON
EU113	Monuwest HE002 MUA Center	EU113PD002	Natural Gas	10200603	CO	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	8.400E+1	LB/E6FT3	0.399	0.399 TON
EU113	Monuwest HE002 MUA Center	EU113PD002	Natural Gas	10200603	NOX	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	1.000E+2	LB/E6FT3	0.475	0.475 TON
EU113	Monuwest HE002 MUA Center	EU113PD002	Natural Gas	10200603	PM	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	7.600E+0	LB/E6FT3	0.0361	0.0361 TON
EU113	Monuwest HE002 MUA Center	EU113PD002	Natural Gas	10200603	PM10-PRI	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	7.600E+0	LB/E6FT3	0.0361	0.0361 TON
EU113	Monuwest HE002 MUA Center	EU113PD002	Natural Gas	10200603	SO2	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	6.000E-1	LB/E6FT3	0.00285	0.00285 TON
EU113	Monuwest HE002 MUA Center	EU113PD002	Natural Gas	10200603	VOC	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	5.500E+0	LB/E6FT3	0.02613	0.02613 TON
EU114	Monuwest HE003 MUA North	EU114PD001	Propane	10201002	CO	USEPA EF NCE	PROPANE	4.70	E3GAL	7.500E+0	LB/E3GAL	0.01763	0.01763 TON
EU114	Monuwest HE003 MUA North	EU114PD001	Propane	10201002	NOX	USEPA EF NCE	PROPANE	4.70	E3GAL	1.300E+1	LB/E3GAL	0.03055	0.03055 TON
EU114	Monuwest HE003 MUA North	EU114PD001	Propane	10201002	PM	USEPA EF NCE	PROPANE	4.70	E3GAL	7.000E-1	LB/E3GAL	0.001645	0.001645 TON
EU114	Monuwest HE003 MUA North	EU114PD001	Propane	10201002	PM10-PRI	USEPA EF NCE	PROPANE	4.70	E3GAL	7.000E-1	LB/E3GAL	0.001645	0.001645 TON
EU114	Monuwest HE003 MUA North	EU114PD001	Propane	10201002	SO2	USEPA EF NCE	PROPANE	4.70	E3GAL	2.000E-2	LB/E3GAL	0.000047	0.000047 TON
EU114	Monuwest HE003 MUA North	EU114PD001	Propane	10201002	VOC	USEPA EF NCE	PROPANE	4.70	E3GAL	1.000E+0	LB/E3GAL	0.00235	0.00235 TON
EU114	Monuwest HE003 MUA North	EU114PD002	Natural Gas	10200603	CO	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	8.400E+1	LB/E6FT3	0.399	0.399 TON
EU114	Monuwest HE003 MUA North	EU114PD002	Natural Gas	10200603	NOX	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	1.000E+2	LB/E6FT3	0.475	0.475 TON
EU114	Monuwest HE003 MUA North	EU114PD002	Natural Gas	10200603	PM	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	7.600E+0	LB/E6FT3	0.0361	0.0361 TON
EU114	Monuwest HE003 MUA North	EU114PD002	Natural Gas	10200603	PM10-PRI	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	7.600E+0	LB/E6FT3	0.0361	0.0361 TON
EU114	Monuwest HE003 MUA North	EU114PD002	Natural Gas	10200603	SO2	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	6.000E-1	LB/E6FT3	0.00285	0.00285 TON
EU114	Monuwest HE003 MUA North	EU114PD002	Natural Gas	10200603	VOC	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	5.500E+0	LB/E6FT3	0.02613	0.02613 TON
EU115	Foundry HE013 MAU Phase I	EU115PD001	Propane	10201002	CO	USEPA EF NCE	PROPANE	4.70	E3GAL	7.500E+0	LB/E3GAL	0.01763	0.01763 TON
EU115	Foundry HE013 MAU Phase I	EU115PD001	Propane	10201002	NOX	USEPA EF NCE	PROPANE	4.70	E3GAL	1.300E+1	LB/E3GAL	0.03055	0.03055 TON
EU115	Foundry HE013 MAU Phase I	EU115PD001	Propane	10201002	PM	USEPA EF NCE	PROPANE	4.70	E3GAL	7.000E-1	LB/E3GAL	0.001645	0.001645 TON
EU115	Foundry HE013 MAU Phase I	EU115PD001	Propane	10201002	PM10-PRI	USEPA EF NCE	PROPANE	4.70	E3GAL	7.000E-1	LB/E3GAL	0.001645	0.001645 TON
EU115	Foundry HE013 MAU Phase I	EU115PD001	Propane	10201002	SO2	USEPA EF NCE	PROPANE	4.70	E3GAL	2.000E-2	LB/E3GAL	0.000047	0.000047 TON
EU115	Foundry HE013 MAU Phase I	EU115PD001	Propane	10201002	VOC	USEPA EF NCE	PROPANE	4.70	E3GAL	1.000E+0	LB/E3GAL	0.00235	0.00235 TON
EU115	Foundry HE013 MAU Phase I	EU115PD002	Natural Gas	10200603	CO	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	8.400E+1	LB/E6FT3	0.399	0.399 TON
EU115	Foundry HE013 MAU Phase I	EU115PD002	Natural Gas	10200603	NOX	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	1.000E+2	LB/E6FT3	0.475	0.475 TON
EU115	Foundry HE013 MAU Phase I	EU115PD002	Natural Gas	10200603	PM	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	7.600E+0	LB/E6FT3	0.0361	0.0361 TON
EU115	Foundry HE013 MAU Phase I	EU115PD002	Natural Gas	10200603	PM10-PRI	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	7.600E+0	LB/E6FT3	0.0361	0.0361 TON
EU115	Foundry HE013 MAU Phase I	EU115PD002	Natural Gas	10200603	SO2	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	6.000E-1	LB/E6FT3	0.00285	0.00285 TON
EU115	Foundry HE013 MAU Phase I	EU115PD002	Natural Gas	10200603	VOC	USEPA EF NCE	NATURAL GAS	9.50	E6FT3	5.500E+0	LB/E6FT3	0.02613	0.02613 TON
EU116	Foundry HE017 MAU Phase II	EU116PD001	Propane	10201002	CO	USEPA EF NCE	PROPANE	4.70	E3GAL	7.500E+0	LB/E3GAL	0.01763	0.01763 TON
EU116	Foundry HE017 MAU Phase II	EU116PD001	Propane	10201002	NOX	USEPA EF NCE	PROPANE	4.70	E3GAL	1.300E+1	LB/E3GAL	0.03055	0.03055 TON
EU116	Foundry HE017 MAU Phase II	EU116PD001	Propane	10201002	PM	USEPA EF NCE	PROPANE	4.70	E3GAL	7.000E-1	LB/E3GAL	0.001645	0.001645 TON
EU116	Foundry HE017 MAU Phase II	EU116PD001	Propane	10201002	PM10-PRI	USEPA EF NCE	PROPANE	4.70	E3GAL	7.000E-1	LB/E3GAL	0.001645	0.001645 TON
EU116	Foundry HE017 MAU Phase II	EU116PD001	Propane	10201002	SO2	USEPA EF NCE	PROPANE	4.70	E3GAL	2.000E-2	LB/E3GAL	0.000047	0.000047 TON
EU116	Foundry HE017 MAU Phase II	EU116PD001	Propane	10201002	VOC	USEPA EF NCE	PROPANE	4.70	E3GAL	1.000E+0	LB/E3GAL	0.00235	0.00235 TON
EU116	Foundry HE017 MAU Phase II	EU116PD002	Natural Gas	10200603	CO	USEPA EF NCE	NATURAL GAS	4.60	E6FT3	8.400E+1	LB/E6FT3	0.1932	0.1932 TON
EU116	Foundry HE017 MAU Phase II	EU116PD002	Natural Gas	10200603	NOX	USEPA EF NCE	NATURAL GAS	4.60	E6FT3	1.000E+2	LB/E6FT3	0.23	0.23 TON
EU116	Foundry HE017 MAU Phase II	EU116PD002	Natural Gas	10200603	PM	USEPA EF NCE	NATURAL GAS	4.60	E6FT3	7.600E+0	LB/E6FT3	0.01748	0.01748 TON
EU116	Foundry HE017 MAU Phase II	EU116PD002	Natural Gas	10200603	PM10-PRI	USEPA EF NCE	NATURAL GAS	4.60	E6FT3	7.600E+0	LB/E6FT3	0.01748	0.01748 TON
EU116	Foundry HE017 MAU Phase II	EU116PD002	Natural Gas	10200603	SO2	USEPA EF NCE	NATURAL GAS	4.60	E6FT3	6.000E-1	LB/E6FT3	0.00138	0.00138 TON
EU116	Foundry HE017 MAU Phase II	EU116PD002	Natural Gas	10200603	VOC	USEPA EF NCE	NATURAL GAS	4.60	E6FT3	5.500E+0	LB/E6FT3	0.01265	0.01265 TON
EU117	Foundry HE018 MAU Phase II	EU117PD001	Propane	10201002	CO	USEPA EF NCE	PROPANE	4.70	E3GAL	7.500E+0	LB/E3GAL	0.01763	0.01763 TON
EU117	Foundry HE018 MAU Phase II	EU117PD001	Propane	10201002	NOX	USEPA EF NCE	PROPANE	4.70	E3GAL	1.300E+1	LB/E3GAL	0.03055	0.03055 TON
EU117	Foundry HE018 MAU Phase II	EU117PD001	Propane	10201002	PM	USEPA EF NCE	PROPANE	4.70	E3GAL	7.000E-1	LB/E3GAL	0.001645	0.001645 TON
EU117	Foundry HE018 MAU Phase II	EU117PD001	Propane	10201002	PM10-PRI	USEPA EF NCE	PROPANE	4.70	E3GAL	7.000E-1	LB/E3GAL	0.001645	0.001645 TON
EU117	Foundry HE018 MAU Phase II	EU117PD001	Propane	10201002	SO2	USEPA EF NCE	PROPANE	4.70	E3GAL	2.000E-2	LB/E3GAL	0.000047	0.000047 TON
EU117	Foundry HE018 MAU Phase II	EU117PD001	Propane	10201002	VOC	USEPA EF NCE	PROPANE	4.70	E3GAL	1.000E+0	LB/E3GAL	0.00235	0.00235 TON
EU117	Foundry HE018 MAU Phase II	EU117PD002	Natural Gas	10200603	CO	USEPA EF NCE	NATURAL GAS	4.60	E6FT3	8.400E+1	LB/E6FT3	0.1932	0.1932 TON
EU117	Foundry HE018 MAU Phase II	EU117PD002	Natural Gas	10200603	NOX	USEPA EF NCE	NATURAL GAS	4.60	E6FT3	1.000E+2	LB/E6FT3	0.23	0.23 TON
EU117	Foundry HE018 MAU Phase II	EU117PD002	Natural Gas	10200603	PM	USEPA EF NCE	NATURAL GAS	4.60	E6FT3	7.600E+0	LB/E6FT3	0.01748	0.01748 TON

EU117	Foundry HE018 MAU Phase II	EU117PD002	Natural Gas	10200603	PM10-PRI	USEPA EF NCE	NATURAL GAS	4.60	E6FT3	7.600E+0	LB/E6FT3				0.01748	0.01748 TON
EU117	Foundry HE018 MAU Phase II	EU117PD002	Natural Gas	10200603	SO2	USEPA EF NCE	NATURAL GAS	4.60	E6FT3	6.000E-1	LB/E6FT3				0.00138	0.00138 TON
EU117	Foundry HE018 MAU Phase II	EU117PD002	Natural Gas	10200603	VOC	USEPA EF NCE	NATURAL GAS	4.60	E6FT3	5.500E+0	LB/E6FT3				0.01265	0.01265 TON
EU118	Monuwest 6 Highlight Stations	EU118PD001	Paint	40200101	PM	MAT BALANCE	COATING MIX	233.00	TON	3.670E-1	LB/TON	80	85	85	0.01368	0.01368 TON
EU118	Monuwest 6 Highlight Stations	EU118PD001	Paint	40200101	PM10-PRI	MAT BALANCE	COATING MIX	233.00	TON	3.670E-1	LB/TON	80	85	85	0.01368	0.01368 TON
EU118	Monuwest 6 Highlight Stations	EU118PD001	Paint	40200101	VOC	MAT BALANCE	COATING	233.00	GAL	4.940E+0	LB/GAL				0.5755	0.5755 TON
EU119	Monuwest 1 Highlight Station	EU119PD001	Paint	40200101	PM	MAT BALANCE	COATING	38.90	GAL	3.670E-1	LB/GAL	80	85	85	0.002284	0.002284 TON
EU119	Monuwest 1 Highlight Station	EU119PD001	Paint	40200101	PM10-PRI	MAT BALANCE	COATING	38.90	GAL	3.670E-1	LB/GAL	80	85	85	0.002284	0.002284 TON
EU119	Monuwest 1 Highlight Station	EU119PD001	Paint	40200101	VOC	MAT BALANCE	COATING	38.90	GAL	4.940E+0	LB/GAL				0.09608	0.09608 TON
EU120	Foundry Finishing Booths	EU120PD001	Bronze melt	30400340	PM	USEPA EF CE	METAL	1,520.00	TON	1.700E+1	LB/TON	100	99	99	0.1292	0.1292 TON
EU120	Foundry Finishing Booths	EU120PD001	Bronze melt	30400340	PM10-PRI	USEPA EF CE	METAL	1,520.00	TON	1.700E+0	LB/TON	100	93	93	0.09044	0.09044 TON
EU121	Support Services activities	EU121PD001	Metal Grinding	30400340	PM	USEPA EF CE	METAL	47.00	TON	1.700E+1	LB/TON	100	99	99	0.003995	0.003995 TON
EU121	Support Services activities	EU121PD001	Metal Grinding	30400340	PM10-PRI	USEPA EF CE	METAL	47.00	TON	1.700E+0	LB/TON	100	93	93	0.002797	0.002797 TON
EU121	Support Services activities	EU121PD002	Powder Mix	30101402	PM	USEPA EF CE	PIGMENT	1.50	TON	2.000E+1	LB/TON	100	99	99	0.00015	0.00015 TON
EU121	Support Services activities	EU121PD002	Powder Mix	30101402	PM10-PRI	USEPA EF CE	PIGMENT	1.50	TON	1.700E+1	LB/TON	100	93	93	0.0008925	0.0008925 TON
EU121	Support Services activities	EU121PD003	Sandblasting	30900202	PM	USEPA EF CE	ABRASIVE	.45	TON	5.500E+1	LB/TON	100	99	99	0.0001238	0.0001238 TON
EU121	Support Services activities	EU121PD003	Sandblasting	30900202	PM10-PRI	USEPA EF CE	ABRASIVE	.45	TON	1.300E+1	LB/TON	100	93	93	0.0002048	0.0002048 TON
EU122	Support Services Emergency Gas Generator	EU122PD001	Natural gas	20200252	CO	USEPA EF NCE	NATURAL GAS	.14	E6FT3	3.937E+2	LB/E6FT3				0.02756	0.02756 TON
EU122	Support Services Emergency Gas Generator	EU122PD001	Natural gas	20200252	NOX	USEPA EF NCE	NATURAL GAS	.14	E6FT3	3.233E+3	LB/E6FT3				0.2263	0.2263 TON
EU122	Support Services Emergency Gas Generator	EU122PD001	Natural gas	20200252	PM	USEPA EF NCE	NATURAL GAS	.14	E6FT3	4.928E+1	LB/E6FT3				0.00345	0.00345 TON
EU122	Support Services Emergency Gas Generator	EU122PD001	Natural gas	20200252	PM10-PRI	USEPA EF NCE	NATURAL GAS	.14	E6FT3	4.928E+1	LB/E6FT3				0.00345	0.00345 TON
EU122	Support Services Emergency Gas Generator	EU122PD001	Natural gas	20200252	SO2	USEPA EF NCE	NATURAL GAS	.14	E6FT3	5.998E-1	LB/E6FT3				0.00004199	0.00004199 TON
EU122	Support Services Emergency Gas Generator	EU122PD001	Natural gas	20200252	VOC	USEPA EF NCE	NATURAL GAS	.14	E6FT3	1.224E+2	LB/E6FT3				0.008568	0.008568 TON
EU123	Monuwest Emergency Diesel Generator	EU123PD001	Diesel	20200102	CO	USEPA EF NCE	DIESEL FUEL	.53	E3GAL	1.300E+2	LB/E3GAL				0.03445	0.03445 TON
EU123	Monuwest Emergency Diesel Generator	EU123PD001	Diesel	20200102	NOX	USEPA EF NCE	DIESEL FUEL	.53	E3GAL	6.040E+2	LB/E3GAL				0.1601	0.1601 TON
EU123	Monuwest Emergency Diesel Generator	EU123PD001	Diesel	20200102	PM	USEPA EF NCE	DIESEL FUEL	.53	E3GAL	4.250E+1	LB/E3GAL				0.01126	0.01126 TON
EU123	Monuwest Emergency Diesel Generator	EU123PD001	Diesel	20200102	PM10-PRI	USEPA EF NCE	DIESEL FUEL	.53	E3GAL	4.250E+1	LB/E3GAL				0.01126	0.01126 TON
EU123	Monuwest Emergency Diesel Generator	EU123PD001	Diesel	20200102	SO2	USEPA EF NCE	DIESEL FUEL	.53	E3GAL	3.970E+1	LB/E3GAL				0.01052	0.01052 TON
EU123	Monuwest Emergency Diesel Generator	EU123PD001	Diesel	20200102	VOC	USEPA EF NCE	DIESEL FUEL	.53	E3GAL	4.930E+1	LB/E3GAL				0.01306	0.01306 TON
EU124	Water Reclaim Emergency Diesel Generator	EU124PD001	Diesel	20200102	CO	USEPA EF NCE	DIESEL FUEL	.09	E3GAL	1.300E+2	LB/E3GAL				0.00585	0.00585 TON
EU124	Water Reclaim Emergency Diesel Generator	EU124PD001	Diesel	20200102	NOX	USEPA EF NCE	DIESEL FUEL	.09	E3GAL	6.040E+2	LB/E3GAL				0.02718	0.02718 TON
EU124	Water Reclaim Emergency Diesel Generator	EU124PD001	Diesel	20200102	PM	USEPA EF NCE	DIESEL FUEL	.09	E3GAL	4.250E+1	LB/E3GAL				0.001913	0.001913 TON
EU124	Water Reclaim Emergency Diesel Generator	EU124PD001	Diesel	20200102	PM10-PRI	USEPA EF NCE	DIESEL FUEL	.09	E3GAL	4.250E+1	LB/E3GAL				0.001913	0.001913 TON
EU124	Water Reclaim Emergency Diesel Generator	EU124PD001	Diesel	20200102	SO2	USEPA EF NCE	DIESEL FUEL	.09	E3GAL	3.970E+1	LB/E3GAL				0.001787	0.001787 TON
EU124	Water Reclaim Emergency Diesel Generator	EU124PD001	Diesel	20200102	VOC	USEPA EF NCE	DIESEL FUEL	.09	E3GAL	4.930E+1	LB/E3GAL				0.002219	0.002219 TON

Total(TON)	CO	3.006
	LEAD*	0.019
	NOX*	4.081
	PM	14.701
	PM10-PRI*	6.840
	SO2*	0.063
	VOC*	8.594
	*Total Billiable	19.597

Attachment 2

Facility Description & CD-01 Forms

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/ Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
1	EU 001	Active	PER 006		☐	001			Wheel Plant Oven	Young Brothers	2862	3281	133		Lb	Hr	
2	EU 001	Removed	PER 007		☐	001			Wheel Plant Oven	Young Brothers	2862	3281	133		Lb	Hr	
3	EU 002	Active	PER 006		☐	002			Wheel Plant Mixer Molder	Cold Spring Granite	none	3281	45		Lb	Hr	
4	EU 002	Removed	PER 007		☐	002			Wheel Plant Mixer Molder	Cold Spring Granite	none	3281	45		Lb	Hr	
5	EU 003	Active	PER 006		☐	003	SV 003 (M)	CE 015	M & W Paint Booth (DC034)	CSG	none	3281	1.067		Gal	Hr	
6	EU 003	Active	PER 007		☐	003	SV 003 (M)	CE 015	Support Services Paint Room	CSG	none	3281	1.067	Paint	Gal	Hr	
7	EU 005	Removed	PER 006		☐	005			REMOVED - Carbo Saw 14	Cold Spring Granite	none	3281	20		Ft2		
8	EU 006	Removed	PER 006		☐	006			REMOVED - Marker Dept. Stripping Booth	Cold Spring Granite	none	3281	7		Each	Hr	
9	EU 007	Removed	PER 006		☐	007			DUP - incl. w/ EU054 (Main Plant Hand Cutters)	unknown	none	3281	100		Ft2		
10	EU 008	Removed	PER 006		☐	008			DUP - incl. w/ EU054 (Main Plant Hand Cutter)	unknown	none	3281	112		Ft2		
11	EU 009	Removed	PER 006		☐	009			DUP - incl. w/EU054 (Marker Dept. Sandblast)	Cold Spring Granite	none	3281	1		Each	Hr	
12	EU 010	Active	PER 006		☐	010	SV 007 (M)	CE 019	Main Sandblast Booth #1 (SB029)	Cold Spring Granite	none	3281	1		Each	Hr	
13	EU 010	Removed	PER 007		☐	010			Main Sandblast Booth #1 (SB029)	Cold Spring Granite	none	3281	1		Each	Hr	
14	EU 011	Removed	PER 006		☐	011			DUP - incl. w/EU054 (Sandblast #2)	Cold Spring Granite	none	3281	50		Ft2		
15	EU 012	Removed	PER 006		☐	012			DUP - incl. w/EU054 (Sandblast #3)	Cold Spring Granite	none	3281	50		Ft2		
16	EU 013	Active	PER 006		☒	IA111			BR003 Main Plant Burner (Nwall)			3281					
17	EU 013	Removed	PER 007		☐	IA111			IA - BR003 Main Plant Burner (Nwall)			3281					
18	EU 014	Removed	PER 006		☒				REMOVED - Main Plant Burn (Gang YD)			3281					
19	EU 015	Active	PER 006		☒	IA035			BR004 West Burner (N Wall)			3281					
20	EU 015	Removed	PER 007		☐	IA035			IA - BR004 West Burner (N Wall)			3281					
21	EU 016	Active	PER 006		☒	IA036			BR026West Burner (N Wall)			3281					

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Comm-ence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
1	EU 001	Active	PER 006	01/01/1993	01/01/1993					
2	EU 001	Removed	PER 007	01/01/1993	01/01/1993	12/31/2007				
3	EU 002	Active	PER 006	01/01/1956	01/01/1956					
4	EU 002	Removed	PER 007	01/01/1956	01/01/1956	12/31/2007				
5	EU 003	Active	PER 006	12/31/1969	12/31/1969					
6	EU 003	Active	PER 007	12/31/1969	12/31/1969					
7	EU 005	Removed	PER 006	12/31/1939	12/31/1939	12/31/2003				
8	EU 006	Removed	PER 006	12/31/1969	12/31/1969	01/01/2001				
9	EU 007	Removed	PER 006	12/31/1969	12/31/1969	10/24/2006				
10	EU 008	Removed	PER 006	12/31/1979	12/31/1979	10/24/2006				
11	EU 009	Removed	PER 006	12/31/1979	12/31/1979	10/24/2006				
12	EU 010	Active	PER 006	12/31/1979	12/31/1979					
13	EU 010	Removed	PER 007	12/31/1979	12/31/1979	12/31/2011				
14	EU 011	Removed	PER 006	12/31/1979	12/31/1979	10/24/2006				
15	EU 012	Removed	PER 006	12/31/1979	12/31/1979	10/24/2006				
16	EU 013	Active	PER 006							
17	EU 013	Removed	PER 007			12/31/2011				
18	EU 014	Removed	PER 006			10/24/2006				
19	EU 015	Active	PER 006							
20	EU 015	Removed	PER 007			12/31/2011				
21	EU 016	Active	PER 006							

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/ Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
22	EU 016	Removed	PER 007		☐	IA036			IA - BR026West Burner (N Wall)			3281					
23	EU 017	Removed	PER 006		☒				REMOVED - West Burner (S Wall)			3281					
24	EU 018	Active	PER 006		☒				BR005 South Burner			3281					
25	EU 018	Removed	PER 007		☐				IA - BR005 South Burner			3281					
26	EU 019	Removed	PER 006		☒				REMOVED - Main Plant Backup Generator			3281					
27	EU 020	Removed	PER 006		☒				REMOVED - Main Plant Backup Generator			3281					
28	EU 021	Active	PER 006		☒	IA120			Water Plant Emergency Generator			3281					
29	EU 021	Removed	PER 007		☐				IA - Water Plant Emergency Generator			3281	200	Energy	Hp		
30	EU 022	Removed	PER 001		☐	013			Main Plant Hand Pitching - REMOVED			3281	14.6		Each	Hr	
31	EU 023	Removed	PER 001		☐	014			Main Plant Hand Pitching - REMOVED			3281	9.6		Each	Hr	
32	EU 024	Removed	PER 001		☐	015			Market Dept Highlighting Station - REMOVED	Cold Spring Granite	none	3281	19		Each	Hr	
33	EU 025	Removed	PER 001		☐	016			Market Dept Chiseling - REMOVED			3281	19		Each	Hr	
34	EU 026	Removed	EIS 009		☐	017	SV 008 (M)		Emery Reclaim Dryer	Cold Spring Granite	none	3281	540	Emery	Lb	Hr	0.59
35	EU 027	Active	PER 001		☒	018	SV 009 (M)		South 1 Ft Splitter (4 units)	Cold Spring Granite	none	3281	112		Ft2		
36	EU 027	Removed	PER 007		☐	018			IA - South 1 Ft Splitter (4 units)	Cold Spring Granite	none	3281	112		Ft2		
37	EU 028	Active	PER 006		☒	019	SV 009 (M)		South 4 Ft Breakers (2 units)	Park Industries	unknown	3281	450		Ft2		
38	EU 028	Removed	PER 007		☐	019			South 4 Ft Breakers (2 units)	Park Industries	unknown	3281	450		Ft2		
39	EU 029	Active	PER 006		☐	020	SV 011 (M)	CE 022	Granite South Tumbler (DC006)	Cold Spring Granite	none	3281	3		Ton	Hr	
40	EU 029	Active	PER 007		☐	020	SV 011 (M)	CE 022	Tumbler (DC006)	Cold Spring Granite	none	3281	3	Product	Ton	Hr	
41	EU 030	Active	PER 006		☒	IA065			Main Office Boiler			3281					
42	EU 030	Removed	PER 007		☐	IA065			IA - Main Office Boiler			3281					
43	EU 031	Removed	PER 006		☒				REMOVED - Main Plant Boiler (east)			3281					

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Comm-ence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
22	EU 016	Removed	PER 007			12/31/2011				
23	EU 017	Removed	PER 006			10/24/2006				
24	EU 018	Active	PER 006							
25	EU 018	Removed	PER 007			12/31/2011				
26	EU 019	Removed	PER 006			07/01/2007				
27	EU 020	Removed	PER 006			08/01/2007				
28	EU 021	Active	PER 006							
29	EU 021	Removed	PER 007			12/31/2011				
30	EU 022	Removed	PER 001			12/31/2000				
31	EU 023	Removed	PER 001			12/31/2000				
32	EU 024	Removed	PER 001			12/31/2000				
33	EU 025	Removed	PER 001			12/31/2000				
34	EU 026	Removed	EIS 009		12/31/1968	12/31/2003				
35	EU 027	Active	PER 001		01/01/1985					
36	EU 027	Removed	PER 007		01/01/1985	01/01/1985				
37	EU 028	Active	PER 006		01/01/1985					
38	EU 028	Removed	PER 007		01/01/1985	01/01/1985				
39	EU 029	Active	PER 006	01/01/1994	01/01/1994					
40	EU 029	Active	PER 007	01/01/1994	01/01/1994					
41	EU 030	Active	PER 006							
42	EU 030	Removed	PER 007			12/31/2011				
43	EU 031	Removed	PER 006			07/01/2007				

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FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/ Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
44	EU 032	Removed	PER 006		☐	021			REMOVED - Main Plant Boiler (center)	Williams Bros. Manfua(	unknown	3281	11	Heat	Mmbtu	Hr	11
45	EU 033	Removed	PER 006		☐	022			REMOVED - Main Plant Boiler (west)	Hegge Simpley Boiler	7842	3281	6.3	Heat	Mmbtu	Hr	6.3
46	EU 034	Removed	PER 006		☒				REMOVED - Emery Reclaim Building Heater			3281					
47	EU 035	Removed	PER 006		☒				REMOVED - Auto Shop Boiler			3281					
48	EU 036	Removed	PER 006		☒				REMOVED - Bundling Shed Heater			3281					
49	EU 037	Active	PER 006		☒		SV 013 (P) SV 014 (P) SV 015 (P) SV 016 (P) SV 017 (P) SV 018 (P) SV 019 (P) SV 020 (P) SV 021 (P) SV 022 (P) SV 023 (P) SV 024 (P)		IA1-3,33,34,39 - Granite West Heaters	Co-Ray Vac.	unknown	3281	6.6	Heat	Mmbtu	Hr	6.6
50	EU 037	Removed	PER 007		☐				IA1-3,33,34,39 - Granite West Heaters	Co-Ray Vac.	unknown	3281	6.6	Heat	Mmbtu	Hr	6.6
51	EU 038	Active	PER 006		☒	G6			3 Meter Plant Space Heat			3281					
52	EU 038	Removed	PER 007		☐	G6			IA - 3 Meter Plant Space Heat			3281					
53	EU 039	Active	PER 006		☒	IA26,27			Reclaim Heater			3281					
54	EU 039	Removed	PER 007		☐	IA26,27			IA - Reclaim Heater			3281					
55	EU 040	Active	PER 006		☒	IA18-25			3 Meter Space Heaters			3281					
56	EU 040	Removed	PER 007		☐	IA18-25			IA - 3 Meter Space Heaters			3281					
57	EU 041	Active	EIS 003		☒				West Plant Office Furnace			3281					
58	EU 041	Removed	PER 007		☐				IA - West Plant Office Furnace			3281					
59	EU 042	Removed	PER 006		☒				REMOVED - East Plant Space Heater			3281					
60	EU 043	Removed	PER 006		☐	024			REMOVED - East Plant Boiler	York Shipley	560-SPLV-15-N/Z	3281	5.021	Heat	Mmbtu	Hr	5.021
61	EU 044	Removed	PER 006		☐	025			REMOVED - East Plant Water Heater #1	Lochnvar	CWN-3000	3281	3.08	Heat	Mmbtu	Hr	3.08

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Comm-ence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
44	EU 032	Removed	PER 006	01/01/1970	01/01/1970	07/01/2007				
45	EU 033	Removed	PER 006	01/01/1971	01/01/1971	07/01/2007				
46	EU 034	Removed	PER 006			07/01/2007				
47	EU 035	Removed	PER 006			07/01/2007				
48	EU 036	Removed	PER 006			07/01/2007				
49	EU 037	Active	PER 006	01/01/1984	01/01/1984					
50	EU 037	Removed	PER 007	01/01/1984	01/01/1984	01/01/1984				
51	EU 038	Active	PER 006							
52	EU 038	Removed	PER 007			12/31/2011				
53	EU 039	Active	PER 006							
54	EU 039	Removed	PER 007			12/31/2011				
55	EU 040	Active	PER 006							
56	EU 040	Removed	PER 007			12/31/2011				
57	EU 041	Active	EIS 003							
58	EU 041	Removed	PER 007			12/31/2011				
59	EU 042	Removed	PER 006			08/01/2006				
60	EU 043	Removed	PER 006	01/01/1983	01/01/1983	08/01/2006				
61	EU 044	Removed	PER 006	01/01/1990	01/01/1990	08/01/2006				

FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 007
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Facility Name: Cold Spring Granite Co

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/ Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
62	EU 045	Active	PER 006		☒				Granite South Heaters			3281					
63	EU 045	Removed	PER 007		☐				IA - Granite South Heaters			3281					
64	EU 046	Active	EIS 003		☒				West Plant Lunchroom Heat			3281					
65	EU 046	Removed	PER 007		☐				IA - West Plant Lunchroom Heat			3281					
66	EU 047	Active	EIS 003		☒				West Plant Washroom Heater			3281					
67	EU 047	Removed	PER 007		☐				IA - West Plant Washroom Heater			3281					
68	EU 048	Removed	PER 006		☒				REMOVED - Main Plant Washroom Heater			3281					
69	EU 049	Removed	PER 006		☒				REMOVED - Main Plant Heater Sandblast			3281					
70	EU 050	Active	EIS 003		☒				South Tumbler Building Heater			3281					
71	EU 050	Removed	PER 007		☐				IA - South Tumbler Building Heater			3281					
72	EU 051	Active	EIS 003		☒				Royal Melrose Furnace (3)			3281					
73	EU 051	Removed	PER 007		☐				IA - Royal Melrose Furnace (3)			3281					
74	EU 052	Active	PER 006		☒				IA13,14,42-48 Monuwest Heaters			3281					
75	EU 052	Removed	PER 007		☐				IA13,14,42-48 Monuwest Heaters			3281					
76	EU 053	Removed	PER 006		☒				REMOVED - Stone Cleaning			3281					
77	EU 054	Active	PER 006		☐	039	SV 029 (M)	CE 024	Monuwest Finishing Operations (North DC021)	various	various	3281					
78	EU 054	Active	PER 007		☐	039	SV 029 (M)	CE 024	Monuwest Finishing (North DC021)	various	various	3281	1	Rock		Hr	
79	EU 055	Active	PER 006		☐	040	SV 030 (M)	CE 025	Monuwest Finishing Operations (West DC020)	various	various	3281					
80	EU 055	Active	PER 007		☐	040	SV 030 (M)	CE 025	Monuwest Finishing (West DC020)	various	various	3281	13.5	Rock	Ft2	Hr	
81	EU 056	Active	PER 006		☐	041	SV 031 (M)	CE 026	Shot Saw (SS001)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
82	EU 056	Removed	PER 007		☐	041			Shot Saw (SS001)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
83	EU 057	Active	PER 006		☐	042	SV 027 (M)	CE 023	Foundry Paint Booth (DC036)	JBI Inc	IDB-88	3281	1.73		Gal	Hr	0.8

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Comm-ence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
62	EU 045	Active	PER 006							
63	EU 045	Removed	PER 007			12/31/2011				
64	EU 046	Active	EIS 003							
65	EU 046	Removed	PER 007			12/31/2011				
66	EU 047	Active	EIS 003							
67	EU 047	Removed	PER 007			12/31/2011				
68	EU 048	Removed	PER 006			07/01/2007				
69	EU 049	Removed	PER 006			07/01/2007				
70	EU 050	Active	EIS 003							
71	EU 050	Removed	PER 007			12/31/2011				
72	EU 051	Active	EIS 003							
73	EU 051	Removed	PER 007			12/31/2011				
74	EU 052	Active	PER 006							
75	EU 052	Removed	PER 007			12/31/2011				
76	EU 053	Removed	PER 006			07/01/2007				
77	EU 054	Active	PER 006		01/01/1997					
78	EU 054	Active	PER 007		01/01/1997					
79	EU 055	Active	PER 006		01/01/1997					
80	EU 055	Active	PER 007		01/01/1997					
81	EU 056	Active	PER 006		05/01/2000					
82	EU 056	Removed	PER 007		05/01/2000	02/29/2012				
83	EU 057	Active	PER 006	05/01/1999	05/01/1999					

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FACILITY DESCRIPTION: EMISSION UNIT (EU)

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Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/ Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
84	EU 057	Active	PER 007		☐	042	SV 027 (M)	CE 023	Foundry Paint Booth (DC036)	JBI Inc	IDB-88	3281	1.73	Paint	Gal	Hr	0.8
85	EU 058	Active	PER 006		☐	043	SV 028 (M)	CE 011	Foundry Sand Blast Booth (WA002)	BCP Blast Cleaning Pr	A4-8776	3281	50	Shot	Lb	Hr	
86	EU 058	Removed	PER 007		☒	043	SV 028 (M)		IA - Foundry Sand Blast Booth (WA002)	BCP Blast Cleaning Pr	A4-8776	3281	50	Shot	Lb	Hr	
87	EU 059	Active	PER 006		☐		SV 034 (M)	CE 014	Foundry Mold Shakeout (MS002)	General Kinematics	SOTM 42x14	3281	2		Ton	Hr	
88	EU 059	Active	PER 007		☐		SV 034 (M)	CE 014	Foundry Shakeout (MS002)	General Kinematics	SOTM 42x14	3281	2	Metal	Ton	Hr	
89	EU 060	Active	PER 006		☐	045	SV 032 (M)	CE 012	Foundry Induction Furnace #1 (FR008)	Pillar	Liftswing 150	3281	0.5		Ton	Hr	
90	EU 060	Active	PER 007		☐	045	SV 032 (M)	CE 012	Foundry Induction Furnace #1 (FR008)	Pillar	Liftswing 150	3281	0.5	Metal	Ton	Hr	
91	EU 061	Active	PER 006		☐	046	SV 028 (M)	CE 011	Foundry Wheelabrator #1 (WA003)	Wheelabrator		3281	50	Shot	Lb	Hr	
92	EU 061	Removed	PER 007		☒	046	SV 028 (M)		IA - Foundry Wheelabrator #1 (WA003)	Wheelabrator		3281	50	Shot	Lb	Hr	
93	EU 062	Removed	PER 006		☐	047			REMOVED - Foundry Wheelabrator #2	Wheelabrator		3281	.755		Ton	Hr	
94	EU 063	Active	PER 006		☐	048	SV 034 (M)	CE 014	Foundry Sand Mixer #1 (SM002)	Kloster	VersaMule Type 1	3281	300		Lb	Min	
95	EU 063	Active	PER 007		☐	048	SV 034 (M)	CE 014	Foundry Mixer East (SM002)	Kloster	VersaMule Type 1	3281	9	Sand	Ton	Hr	
96	EU 064	Active	PER 002		☐	049	SV 034 (M)	CE 014	Foundry Sand Silo #1	Dynamic Air	none	3281	1500		Ft3	Day	
97	EU 064	Removed	PER 007		☒	049	SV 034 (M)		IA - Foundry Sand Silo #1	Dynamic Air	none	3281	1500		Ft3	Day	
98	EU 065	Active	PER 006		☐		SV 034 (M)	CE 014	Foundry Sand Reclaim - Vibra Mill #1 (VM003)	General Kinematics	VM27	3281	2		Ton	Hr	
99	EU 065	Active	PER 007		☐		SV 034 (M)	CE 014	Foundry Vibra Mill #1 (VM003)	General Kinematics	VM27	3281	9	Sand	Ton	Hr	
100	EU 066	Active	PER 006		☐	044	SV 032 (M)	CE 012	Foundry Bronze Pouring (CV032) and Cooling (CV053)	Pillar/Gen Kinematics	Liftswing 150	3281	2		Ton	Hr	
101	EU 066	Active	PER 007		☐	044	SV 032 (M)	CE 012	Pouring and Cooling (CV 0032, 0035, 0051, 0053)	Pillar/Gen Kinematics	Liftswing 150	3281	2	Metal	Ton	Hr	
102	EU 067	Removed	PER 006		☐	025			REMOVED - East Plant Water Heater #2	Lochnvar	CWN-3000	3281	3.08	Heat	Mmbtu	Hr	3.08
103	EU 068	Active	PER 006		☐	045	SV 032 (M)	CE 012	Foundry Induction Furnace #2 (FR009)	Pillar	Liftswing 150	3281	0.5		Ton	Hr	
104	EU 068	Active	PER 007		☐	045	SV 032 (M)	CE 012	Foundry Induction Furnace #2 (FR009)	Pillar	Liftswing 150	3281	0.5	Metal	Ton	Hr	

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Comm-ence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
84	EU 057	Active	PER 007	05/01/1999	05/01/1999					
85	EU 058	Active	PER 006	05/01/1999	05/01/1999					
86	EU 058	Removed	PER 007	05/01/1999	05/01/1999					
87	EU 059	Active	PER 006	05/15/2002						
88	EU 059	Active	PER 007	05/15/2002						
89	EU 060	Active	PER 006	11/01/2000	05/01/2001					
90	EU 060	Active	PER 007	11/01/2000	05/01/2001					
91	EU 061	Active	PER 006	05/15/2002						
92	EU 061	Removed	PER 007	05/15/2002		01/20/2012				
93	EU 062	Removed	PER 006	05/15/2002		01/01/2001				
94	EU 063	Active	PER 006	05/15/2002						
95	EU 063	Active	PER 007	05/15/2002						
96	EU 064	Active	PER 002	05/15/2002						
97	EU 064	Removed	PER 007	05/15/2002		01/20/2012				
98	EU 065	Active	PER 006	05/15/2002						
99	EU 065	Active	PER 007	05/15/2002						
100	EU 066	Active	PER 006	05/15/2002						
101	EU 066	Active	PER 007	05/15/2002						
102	EU 067	Removed	PER 006	01/01/1990	01/01/1990	08/01/2007				
103	EU 068	Active	PER 006	11/01/2000	05/01/2001					
104	EU 068	Active	PER 007	11/01/2000	05/01/2001					

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FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/ Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
105	EU 069	Active	PER 006		☐	045	SV 032 (M)	CE 012	Foundry Induction Furnace #3 (FR010)	Pillar	Liftswing 150	3281	0.5		Ton	Hr	
106	EU 069	Active	PER 007		☐	045	SV 032 (M)	CE 012	Foundry Induction Furnace #3 (FR010)	Pillar	Liftswing 150	3281	0.5	Metal	Ton	Hr	
107	EU 070	Active	PER 006		☐	045	SV 032 (M)	CE 012	Foundry Induction Furnace #4 (FR011)	Pillar	Liftswing 150	3281	0.5		Ton	Hr	
108	EU 070	Active	PER 007		☐	045	SV 032 (M)	CE 012	Foundry Induction Furnace #4 (FR011)	Pillar	Liftswing 150	3281	0.5	Metal	Ton	Hr	
109	EU 071	Removed	PER 006		☐	009			REMOVED - Marker Dept. Sandblast Booth #2	Cold Spring Granite	na	3281	1		Each	Hr	
110	EU 072	Removed	PER 006		☐	009			REMOVED - Marker Dept. Sandblast Booth #3	Cold Spring Granite	na	3281	1		Each	Hr	
111	EU 073	Removed	PER 006		☐	009			REMOVED - Marker Dept. Sandblast Booth #4	Cold Spring Granite	na	3281	1		Each	Hr	
112	EU 074	Removed	PER 006		☐	009			REMOVED - Marker Dept. Sandblast Booth #5	Cold Spring Granite	na	3281	1		Each	Hr	
113	EU 075	Removed	PER 006		☐	009			REMOVED - Marker Dept. Sandblast Booth #6	Cold Spring Granite	na	3281	1		Each	Hr	
114	EU 076	Removed	PER 006		☐	009			REMOVED - Marker Dept. Sandblast Booth #7	Cold Spring Granite	na	3281	1		Each	Hr	
115	EU 077	Removed	EIS 009		☐				Foundry Induction Furnace #1			3281					
116	EU 078	Removed	EIS 009		☐				Foundry Induction Furnace #2			3281					
117	EU 079	Removed	EIS 009		☐				Foundry Induction Furnace #3			3281					
118	EU 080	Removed	EIS 009		☐	029			Foundry Pouring/Cooling	NA	NA	3281	1500		Lb	Hr	
119	EU 081	Removed	EIS 009		☐	036			Foundry Silo Sand Transport	Dynamic Air	ET200	3281	26000		Lb	Hr	
120	EU 082	Removed	EIS 009		☐				Foundry Sand Handling/Mixing			3281					
121	EU 083	Removed	EIS 009		☐	030	SV 037 (M)		Foundry Shakeout	General Kinematics	VM-64	3281	7000		Lb	Hr	
122	EU 084	Removed	EIS 009		☐	031	SV 037 (M)		Foundry Sand Reclaim	National Engineering	Z-Cell	3281	7000		Lb	Hr	
123	EU 085	Removed	PER 006		☐	033			REMOVED - Foundry Shot Blast Booth	Wheelabrator	66"	3281	1500		Lb	Hr	
124	EU 086	Removed	PER 003		☐	035	SV 032 (M)		Core Molding	Dependable	unknown	3281	65		Lb	Hr	0.35
125	EU 087	Removed	EIS 009		☐	037			Foundry Roof Sand Transport	Dynamic Air	ET100	3281	13000		Lb	Hr	
126	EU 088	Active	PER 006		☐	041	SV 031 (M)	CE 011	Granite West Shot Saw (SS002)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Comm-ence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
105	EU 069	Active	PER 006	11/01/2000	05/01/2001					
106	EU 069	Active	PER 007	11/01/2000	05/01/2001					
107	EU 070	Active	PER 006	11/01/2000	05/01/2001					
108	EU 070	Active	PER 007	11/01/2000	05/01/2001					
109	EU 071	Removed	PER 006	12/31/1979	12/31/1979	01/01/2007				
110	EU 072	Removed	PER 006	12/31/1979	12/31/1979	01/01/2007				
111	EU 073	Removed	PER 006	12/31/1979	12/31/1979	01/01/2007				
112	EU 074	Removed	PER 006	12/31/1979	12/31/1979	01/01/2007				
113	EU 075	Removed	PER 006	12/31/1979	12/31/1979	01/01/2007				
114	EU 076	Removed	PER 006	12/31/1979	12/31/1979	01/01/2007				
115	EU 077	Removed	EIS 009			12/31/2003				
116	EU 078	Removed	EIS 009			12/31/2003				
117	EU 079	Removed	EIS 009			12/31/2003				
118	EU 080	Removed	EIS 009	07/01/1981	07/01/1981	12/31/2003				
119	EU 081	Removed	EIS 009	01/01/1989	01/01/1989	12/31/2003				
120	EU 082	Removed	EIS 009			12/31/2003				
121	EU 083	Removed	EIS 009	09/01/1989	09/01/1989	12/31/2003				
122	EU 084	Removed	EIS 009	09/01/1989	09/01/1989	12/31/2003				
123	EU 085	Removed	PER 006	01/01/1947	01/01/1982	01/01/2007				
124	EU 086	Removed	PER 003	01/01/1962	01/01/1962	07/26/2004				
125	EU 087	Removed	EIS 009	01/01/1989	01/01/1989	12/31/2003				
126	EU 088	Active	PER 006		05/01/2002					

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/ Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
127	EU 088	Removed	PER 007		☐	041			Granite West Shot Saw (SS002)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
128	EU 089	Active	PER 006		☐	041	SV 031 (M)	CE 011	Granite West Shot Saw (SS003)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
129	EU 089	Removed	PER 007		☐	041			Granite West Shot Saw (SS003)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
130	EU 090	Active	PER 006		☐	041	SV 031 (M)	CE 011	Granite West Shot Saw (SS004)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
131	EU 090	Removed	PER 007		☐	041			Granite West Shot Saw (SS004)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
132	EU 091	Active	PER 006		☐	041	SV 031 (M)	CE 011	Granite West Shot Saw (SS005)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
133	EU 091	Removed	PER 007		☒	041	SV 031 (M)		IA - Granite West Shot Saw (SS005)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
134	EU 092	Active	PER 006		☐	041	SV 031 (M)	CE 011	Granite West Shot Saw (SS006)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
135	EU 092	Removed	PER 007		☒	041	SV 031 (M)		IA - Granite West Shot Saw (SS006)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
136	EU 093	Removed	EIS 009		☐	032	SV 037 (M)		Foundry Sand Heater/Cooler	Kloster	MS 4046	3281	4.5		Ton	Hr	
137	EU 094	Active	PER 006		☐		SV 041 (M)		Monuwest Generator	Caterpillar	D150-8	3281	219	Energy	Hp		1.5
138	EU 094	Active	PER 007		☐		SV 041 (M)		Monuwest Diesel Generator	Caterpillar	D150-8	3281	219	Energy	Hp		1.6
139	EU 095	Active	PER 006		☐		SV 034 (M)	CE 014	Foundry Sand Reclaim VibraMill #2 (VM002)	General Kinematics	VM 64	3281	2		Ton	Hr	
140	EU 095	Active	PER 007		☐		SV 034 (M)	CE 014	Foundry VibraMill #2 (VM002)	General Kinematics	VM 64	3281	9	Sand	Ton	Hr	
141	EU 096	Active	PER 006		☐		SV 035 (M)	CE 031	Foundry Thermal Reclaim (SR002)	Gudgeon	Thermfire 6000	3281	3		Ton	Hr	4.67
142	EU 096	Active	PER 007		☐		SV 035 (M)	CE 031	Foundry Thermal Reclaim (SR002)	Gudgeon	Thermfire 6000	3281	3	Sand	Ton	Hr	4.67
143	EU 097	Active	PER 006		☐	048	SV 034 (M)	CE 014	Foundry Sand Mixer #2 (SM005)	Kloster	VersaMule Type 2	3281	300		Lb	Min	
144	EU 097	Active	PER 007		☐	048	SV 034 (M)	CE 014	Foundry Sand Mixer #2 (SM005)	Kloster	VersaMule Type 2	3281	9	Sand	Ton	Hr	
145	EU 098	Removed	PER 006		☐	048	SV 034 (M)		Foundry Sand Mixer #3	Kloster	VersaMule Type 1	3281	600		Lb	Min	
146	EU 099	Active	PER 006		☐	049	SV 034 (M)	CE 014	Foundry Sand Silo #2 (SA002)	Dynamic Air	none	3281	1500		Ft3	Day	
147	EU 099	Removed	PER 007		☒	049	SV 034 (M)		IA - Foundry Sand Silo #2 (SA002)	Dynamic Air	none	3281	1500		Ft3	Day	

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Comm-ence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
127	EU 088	Removed	PER 007		05/01/2002	02/29/2012				
128	EU 089	Active	PER 006		05/01/2002					
129	EU 089	Removed	PER 007		05/01/2002	02/29/2012				
130	EU 090	Active	PER 006		05/01/2002					
131	EU 090	Removed	PER 007		05/01/2002	02/29/2012				
132	EU 091	Active	PER 006		05/01/2002					
133	EU 091	Removed	PER 007		05/01/2002	01/20/2012				
134	EU 092	Active	PER 006		05/01/2002					
135	EU 092	Removed	PER 007		05/01/2002	01/20/2012				
136	EU 093	Removed	EIS 009	01/01/1990	01/01/1990	12/31/2003				
137	EU 094	Active	PER 006		04/01/2002					
138	EU 094	Active	PER 007		04/01/2002					
139	EU 095	Active	PER 006	05/15/2002						
140	EU 095	Active	PER 007	05/15/2002						
141	EU 096	Active	PER 006	05/15/2002						
142	EU 096	Active	PER 007	05/15/2002						
143	EU 097	Active	PER 006	05/15/2002						
144	EU 097	Active	PER 007	05/15/2002						
145	EU 098	Removed	PER 006	05/15/2002		05/16/2002				
146	EU 099	Active	PER 006	05/15/2002						
147	EU 099	Removed	PER 007	05/15/2002		01/20/2012				

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/ Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
148	EU 100	Active	PER 006		☐	049	SV 034 (M)	CE 014	Foundry Sand Silo #3 (SA002)	Dynamic Air	none	3281	1500		Ft3	Day	
149	EU 100	Removed	PER 007		☒	049	SV 034 (M)		IA - Foundry Sand Silo #3 (SA002)	Dynamic Air	none	3281	1500		Ft3	Day	
150	EU 101	Active	PER 006		☐	049	SV 034 (M)	CE 014	Foundry Sand Silo #4 (SA002)	Dynamic Air	none	3281	1200		Ft3	Day	
151	EU 101	Removed	PER 007		☒	049	SV 034 (M)		IA - Foundry Sand Silo #4 (SA002)	Dynamic Air	none	3281	1200		Ft3	Day	
152	EU 102	Active	PER 006		☐	049	SV 034 (M)	CE 014	Foundry Sand Silo #5 (SA001)	Dynamic Air	none	3281	100		Ft3	Day	
153	EU 102	Removed	PER 007		☒	049	SV 034 (M)		IA - Foundry Sand Silo #5 (SA001)	Dynamic Air	none	3281	100		Ft3	Day	
154	EU 103	Active	PER 006		☐		SV 042	CE 032	Lacquer Finish Booth (DC049)	JBI	PIDB-88	3281	0.54		Gal	Hr	0.8
155	EU 103	Active	PER 007		☐		SV 042 (M)	CE 032	Foundry Lacquer Booth (DC049) Sprayer #1	JBI	PIDB-88	3281	0.54		Gal	Hr	0.8
156	EU 104	Active	PER 006		☐		SV 031 (M)	CE 026	Granite West Shot Saw (SS007)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
157	EU 104	Removed	PER 007		☒		SV 031 (M)		IA - Granite West Shot Saw (SS007)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
158	EU 105	Active	PER 006		☐		SV 031 (M)	CE 026	Granite West Shot Saw (SS008)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
159	EU 105	Removed	PER 007		☒		SV 031 (M)		IA - Granite West Shot Saw (SS008)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
160	EU 106	Active	PER 006		☐		SV 031 (M)	CE 026	Granite West Shot Saw (SS009)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
161	EU 106	Removed	PER 007		☒		SV 031 (M)		IA - Granite West Shot Saw (SS009)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
162	EU 107	Active	PER 006		☐		SV 031 (M)	CE 026	Granite West Shot Saw (SS010)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
163	EU 107	Removed	PER 007		☒		SV 031 (M)		IA - Granite West Shot Saw (SS010)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
164	EU 108	Active	PER 006		☐		SV 031 (M)	CE 026	Granite West Shot Saw (SS011)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
165	EU 108	Removed	PER 007		☒		SV 031 (M)		IA - Granite West Shot Saw (SS011)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
166	EU 109	Active	PER 006		☐		SV 031 (M)	CE 026	Granite West Shot Saw (SS012)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	
167	EU 109	Removed	PER 007		☒		SV 031 (M)		IA - Granite West Shot Saw (SS012)	Barsanti	Alcione 420	3281	0.47		Ton	Hr	

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Comm-ence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
148	EU 100	Active	PER 006	05/15/2002						
149	EU 100	Removed	PER 007	05/15/2002		01/20/2012				
150	EU 101	Active	PER 006	05/15/2002						
151	EU 101	Removed	PER 007	05/15/2002		01/20/2012				
152	EU 102	Active	PER 006	05/15/2002						
153	EU 102	Removed	PER 007	05/15/2002		01/20/2012				
154	EU 103	Active	PER 006	04/17/2003	07/02/2003					
155	EU 103	Active	PER 007	04/17/2003	07/02/2003					
156	EU 104	Active	PER 006		05/01/2002					
157	EU 104	Removed	PER 007		05/01/2002	01/20/2012				
158	EU 105	Active	PER 006		05/01/2002					
159	EU 105	Removed	PER 007		05/01/2002	01/20/2012				
160	EU 106	Active	PER 006		05/01/2002					
161	EU 106	Removed	PER 007		05/01/2002	01/20/2012				
162	EU 107	Active	PER 006		05/01/2002					
163	EU 107	Removed	PER 007		05/01/2002	01/20/2012				
164	EU 108	Active	PER 006		05/01/2002					
165	EU 108	Removed	PER 007		05/01/2002	01/20/2012				
166	EU 109	Active	PER 006		05/01/2002					
167	EU 109	Removed	PER 007		05/01/2002					

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/ Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
168	EU 110	Active	PER 006		☐				Shot Saws HE010 MUA North	King National		3281					8.1
169	EU 110	Active	PER 007		☐				Shot Saw Area Makeup Air Heater	King National		3281		Heat	Mmbtu	Hr	8.1
170	EU 111	Active	PER 006		☐				Shot Saws HE011 MUA West	King National		3281					8.1
171	EU 111	Active	PER 007		☐				Shot Saw Area Makeup Air Heater	King National		3281		Heat	Mmbtu	Hr	8.1
172	EU 112	Active	PER 006		☐				Monuwest HE001 MUA South	Hastings		3281					6.0
173	EU 112	Active	PER 007		☐				Monuwest Makeup Air Heater (HE001)	Hastings		3281		Heat	Mmbtu	Hr	6.0
174	EU 113	Active	PER 006		☐				Monuwest HE002 MUA Center	Hastings		3281					6.0
175	EU 113	Active	PER 007		☐				Monuwest Makeup Air Heater (HE002)	Hastings		3281		Heat	Mmbtu	Hr	6.0
176	EU 114	Active	PER 006		☐				Monuwest HE003 MUA North	Hastings		3281					6.0
177	EU 114	Active	PER 007		☐				Monuwest Makeup Air Heater (HE003)	Hastings		3281		Heat	Mmbtu	Hr	6.0
178	EU 115	Active	PER 006		☐				Foundry HE013 MAU Phase I	JBI	DPCC 3303 HRS	3281					10.45
179	EU 115	Active	PER 007		☐				Foundry Makeup Air Heater (HE013)	JBI	DPCC 3303 HRS	3281		Heat	Mmbtu	Hr	10.45
180	EU 116	Active	PER 006		☐				Foundry HE017 MAU Phase II	King National	6236 HRS	3281					9.45
181	EU 116	Active	PER 007		☐				Foundry Makeup Air Heater (HE017)	King National	6236 HRS	3281		Heat	Mmbtu	Hr	9.45
182	EU 117	Active	PER 006		☐				Foundry HE018 MAU Phase II	King National	6236 HRS	3281					9.45
183	EU 117	Active	PER 007		☐				Foundry Makeup Air Heater (HE018)	King National	6236 HRS	3281		Heat	Mmbtu	Hr	9.45
184	EU 118	Active	PER 006		☐		SV 043 (M)	CE 033	Monuwest 6 Highlight Stations	CSG		3281	6.0		Gal	Hr	
185	EU 118	Active	PER 007		☐		SV 043 (M)	CE 033	Monuwest 5 Highlite Panel Filter Stations	CSG		3281	5.0	Paint	Gal	Hr	
186	EU 119	Active	PER 006		☐		SV 044 (M)	CE 034	Monuwest 1 Highlight Station	CSG		3281	1		Gal	Hr	
187	EU 119	Active	PER 007		☐		SV 044 (M)	CE 034	Monuwest 1 Highlite Panel Filter Station	CSG		3281	1	Paint	Gal	Hr	
188	EU 120	Active	PER 006		☐		SV 028 (M)	CE 011	Foundry Finishing Booths	CSG		3281	2		Ton	Hr	
189	EU 120	Active	PER 007		☐		SV 028 (M)	CE 011	Foundry Finishing	CSG		3281	2	Metal	Ton	Hr	
190	EU 121	Active	PER 006		☐		SV 045 (M)	CE 035	Support Services activities	various	various	3281					

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Comm-ence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
168	EU 110	Active	PER 006		05/01/2000					
169	EU 110	Active	PER 007		05/01/2000					
170	EU 111	Active	PER 006		05/01/2000					
171	EU 111	Active	PER 007		05/01/2000					
172	EU 112	Active	PER 006		01/01/1997					
173	EU 112	Active	PER 007		01/01/1997					
174	EU 113	Active	PER 006		01/01/1997					
175	EU 113	Active	PER 007		01/01/1997					
176	EU 114	Active	PER 006		01/01/1997					
177	EU 114	Active	PER 007		01/01/1997					
178	EU 115	Active	PER 006		05/01/2001					
179	EU 115	Active	PER 007		05/01/2001					
180	EU 116	Active	PER 006		05/01/2001					
181	EU 116	Active	PER 007		05/01/2001					
182	EU 117	Active	PER 006		05/01/2001					
183	EU 117	Active	PER 007		05/01/2001					
184	EU 118	Active	PER 006		02/01/2007					
185	EU 118	Active	PER 007		02/01/2007					
186	EU 119	Active	PER 006		02/01/2007					
187	EU 119	Active	PER 007		02/01/2007					
188	EU 120	Active	PER 006		05/01/2001					
189	EU 120	Active	PER 007		05/01/2001					
190	EU 121	Active	PER 006							

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
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ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/ Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity			Max Fuel Input (mil Btu)
														Materials	Units n	Units d	
191	EU 121	Active	PER 007		☐		SV 045 (M)	CE 035	Diamond Dept/Support Services	various	various	3281	45000	Airflow	Ft3	Min	
192	EU 122	Active	PER 006		☐		SV 046 (M)		Support Services Emergency Gas Generator	Caterpillar	SR4B	3281					2.0517
193	EU 122	Active	PER 007		☐		SV 046 (M)		Support Services Natural Gas Generator	Caterpillar	SR4B	3281	150	Elect Energy	Kw		2.0517
194	EU 123	Active	PER 006		☐		SV 047 (M)		Monuwest Emergency Diesel Generator	Caterpillar	3406C TA	3281	400	Energy	Hp		
195	EU 123	Active	PER 007		☐		SV 047 (M)		Monuwest Diesel Generator	Caterpillar	3406C TA	3281	300	Energy	Hp		
196	EU 124	Active	EIS 015		☐				Water Reclaim Emergency Diesel Generator			3281	200	Energy	Hp		
197	EU 124	Active	PER 007		☐		SV 048 (M)		Water Reclaim Diesel Generator			3281	200	Energy	Hp		0.051
198	EU 125	Active	PER 007		☐		SV 042 (M)	CE 032	Lacquer Finish Booth (DC049) Sprayer #2	JBI	PIDB-88	3281	0.54	Paint	Lb	Hr	
199	EU 126	Active	PER 007		☐	HE025			HE 025 Hastings space heater - north			3281	5.832	Heat	Mmbtu	Hr	5.832
200	EU 127	Active	PER 007		☐	HE026			HE 026 Weather Rite space heater - north			3281	5	Heat	Mmbtu	Hr	5
201	EU 128	Active	PER 007		☐	OV006	SV 050 (M)		Paint Curing Oven			3281	2.5	Heat	Mmbtu	Hr	2.5
202	EU 129	Active	PER 007		☐		SV 049 (M)		Foundry Emergency Generator			3281	2	Heat	Mmbtu	Hr	2

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Comm-ence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
191	EU 121	Active	PER 007		01/01/2008					
192	EU 122	Active	PER 006							
193	EU 122	Active	PER 007		01/01/2008					
194	EU 123	Active	PER 006							
195	EU 123	Active	PER 007		01/01/2008					
196	EU 124	Active	EIS 015							
197	EU 124	Active	PER 007		01/01/1986					
198	EU 125	Active	PER 007							
199	EU 126	Active	PER 007							
200	EU 127	Active	PER 007							
201	EU 128	Active	PER 007							
202	EU 129	Active	PER 007							

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: CONTROL EQUIPMENT (CE)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Control Equip. Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Control Equip. Type	Control Equipment Description	Manufacturer	Model	Pollutants Controlled	Capture Efficiency (%)	Destruction/ Collection Efficiency (%)	Afterburner Combustion Parameters
1	CE 001	Removed	PER 001			011	Electrostatic Precipitator - Medium Efficiency						
2	CE 002	Removed	PER 001			009	Centrifugal Collector - Low Efficiency						
3	CE 003	Removed	PER 001			010	Electrostatic Precipitator - High Efficiency						
4	CE 004	Removed	PER 001			004	Gravity Collector - High Efficiency						
5	CE 005	Removed	PER 001			004	Gravity Collector - High Efficiency						
6	CE 006	Removed	PER 001			004	Gravity Collector - High Efficiency						
7	CE 007	Removed	PER 001			008	Centrifugal Collector - Medium Efficiency						
8	CE 008	Removed	PER 001			099	Filter Cartridges						
9	CE 009	Removed	PER 001			099	Filter Cartridges						
10	CE 010	Removed	PER 001			008	Centrifugal Collector - Medium Efficiency						
11	CE 011	Active	PER 006		DC026	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Steel Craft Corp.	MS-10-800-9880	PM10 PM	100% 100%	99% 99%	
12	CE 011	Active	PER 007		DC026	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Steel Craft Corp.	MS-10-800-9880	PM10 PM10 PM PM	100% 80 100% 80	99% 93 99% 99	
13	CE 012	Active	PER 006		DC046	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Steel Craft	Filtrex MST 10-950-11733	PM10 PM	80% 80%	99% 99%	
14	CE 012	Active	PER 007		DC046	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Steel Craft	Filtrex MST 10-950-11733	PM10 PM10 PM PM	80% 80 80% 80	99% 93 99% 99	
15	CE 013	Active	PER 006		DC044	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Pace Engineering	13365-B250-AN-EN-HA2	PM10 PM	100% 100%	99% 99%	
16	CE 013	Active	PER 007		DC044	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Pace Engineering	13365-B250-AN-EN-HA2	PM10 PM10 PM PM	100% 100 100% 100	99% 93 99% 99	
17	CE 014	Active	PER 006		DC047	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F			PM10 PM	80% 80%	99% 99%	
18	CE 014	Active	PER 007		DC047	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F			PM10 PM10 PM PM	80% 80 80% 80	99% 93 99% 99	
19	CE 015	Active	PER 006		DC034	058	Mat or Panel Filter	Cold Spring Granite	none	PM10 PM	80% 80%	92% 92%	

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: CONTROL EQUIPMENT (CE)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Control Equip. Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Control Equip. Type	Control Equipment Description	Manufacturer	Model	Pollutants Controlled	Capture Efficiency (%)	Destruction/ Collection Efficiency (%)	Afterburner Combustion Parameters
20	CE 015	Active	PER 007		DC034	058	Mat or Panel Filter	Cold Spring Granite	none	PM10 PM10 PM PM	80% 100 80% 100	92% 85 92% 85	
21	CE 016	Removed	PER 002		010	001	Wet Scrubber - High Efficiency	Rotoclone	#27	PM	50%	90%	
22	CE 017	Removed	PER 006		004	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Wheelabrator	525KD	PM	100%	99%	
23	CE 018	Removed	PER 006		002	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Wheelabrator	525KD	PM	100%	99%	
24	CE 019	Active	PER 006		DC003	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Ruemelin	1830	PM10 PM	100% 100%	99% 99%	
25	CE 019	Removed	PER 007		DC003	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Ruemelin	1830	PM10 PM	100% 100%	99% 99%	
26	CE 020	Removed	PER 002		001	001	Wet Scrubber - High Efficiency	Uni-Wash, Inc.	CCBD-20	PM	100%	90%	
27	CE 021	Removed	PER 006		006	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Carbarundum	unknown	PM10 PM	50% 50%	99% 99%	
28	CE 022	Active	PER 006		DC006	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Pangborn	unknown	PM10 PM	100% 100%	99% 99%	
29	CE 022	Active	PER 007		DC006	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Pangborn	unknown	PM10 PM10 PM PM	100% 100 100% 100	99% 93 99% 99	
30	CE 023	Active	PER 006		DC036	058	Mat or Panel Filter	RP Paint Arrestors	3032	PM10 PM	80% 80%	92% 92%	
31	CE 023	Active	PER 007		DC036	058	Mat or Panel Filter	RP Paint Arrestors	3032	PM10 PM10 PM PM	80% 80 80% 80	92% 85 92% 85	
32	CE 024	Active	PER 006		DC021	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Pace Engineering	13365-B250-AN-EN-HA2	PM10 PM	100% 100%	99% 99%	
33	CE 024	Active	PER 007		DC021	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Pace Engineering	13365-B250-AN-EN-HA2	PM10 PM10 PM PM	100% 80 100% 80	99% 93 99% 99	
34	CE 025	Active	PER 006		DC020	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Pace Engineering	13365-B250-AN-EN-HA2	PM10 PM	80% 80%	99% 99%	
35	CE 025	Active	PER 007		DC020	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Pace Engineering	13365-B250-AN-EN-HA2	PM10 PM10 PM PM	80% 80 80% 80	99% 93 99% 99	
36	CE 026	Active	PER 006		DC032	001	Wet Scrubber - High Efficiency	Thiel Air	OS-28H	PM10 PM	100% 100%	20% 20%	

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: CONTROL EQUIPMENT (CE)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Control Equip. Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Control Equip. Type	Control Equipment Description	Manufacturer	Model	Pollutants Controlled	Capture Efficiency (%)	Destruction/ Collection Efficiency (%)	Afterburner Combustion Parameters
37	CE 026	Active	PER 007		DC032	001	Wet Scrubber - High Efficiency	Thiel Air	OS-28H	PM10 PM10 PM PM	100% 100 100% 100	20% 25 20% 25	
38	CE 028	Removed	PER 006		012	099	Cartridge Filter	Torit	IGO17175	PM	100%	99%	
39	CE 029	Removed	PER 006		015	099	Cartridge Filter	ModuKleen	400	PM	100%	99%	
40	CE 030	Removed	PER 006		016	099	Cartridge Filter	ModuKleen	400	PM	100%	99%	
41	CE 031	Active	PER 006		DC045	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Gungeon AIR	16125PD12	PM10 PM		99% 99%	
42	CE 031	Active	PER 007		DC045	018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Gungeon AIR	16125PD12	PM10 PM10 PM PM	 100 100	99% 93 99% 99	
43	CE 032	Active	PER 006			058	Mat or Panel Filter	JBI	PIDB-88	PM10 PM	100 100	92 92	
44	CE 032	Active	PER 007			058	Mat or Panel Filter	JBI	PIDB-88	PM10 PM10 PM PM	100 100 100 100	92 85 92 85	
45	CE 033	Active	PER 006			058	Mat or Panel Filter	tbd	tbd	PM10 PM	100% 100%	92% 92%	
46	CE 033	Active	PER 007			058	Mat or Panel Filter	tbd	tbd	PM10 PM10 PM PM	100% 80 100% 80	92% 85 92% 85	
47	CE 034	Active	PER 006			058	Mat or Panel Filter	tbd	tbd	PM10 PM	100% 100%	92% 92%	
48	CE 034	Active	PER 007			058	Mat or Panel Filter	tbd	tbd	PM10 PM10 PM PM	100% 80 100% 80	92% 85 92% 85	
49	CE 035	Active	PER 006			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Donaldson	Torit IG017175	PM10 PM	100% 100%	99% 99%	
50	CE 035	Active	PER 007			018	Fabric Filter - Low Temperature, i.e., T<180 Degrees F	Donaldson	Torit IG017175	PM10 PM10 PM PM	100% 80 100% 80	99% 93 99% 99	

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (ºF)	Flow Rate/ Temperature Information Source	Discharge Direction
								Diameter or Length (feet)	Width (feet)				
1	SV 001	Retired	PER 006		001	Wheel Plant Baking Oven	19	0.83		3200	400	Estimate	Up, With Cap
2	SV 002	Retired	PER 006		002	Wheel Plant Mixing and Molding	18	0.75	0.75	800	70	Estimate	Horizontal
3	SV 003	Active	PER 006		003	M&W Paint Booth (DC034)	11	2.0	2.0	3800	70	Estimate	Horizontal
4	SV 003	Active	PER 007		003	Support Services Paint Room	45	1.5		2000	70	Estimate	Up, No Cap
5	SV 004	Removec	PER 002		006	Carbo Saw #14	42	0.88	5.0	8350	70	Estimate	Up, No Cap
6	SV 005	Removec	PER 006		007	Main Plant Hand Cutters	25	2.0	2.0	9200	70	Estimate	Horizontal
7	SV 006	Removec	PER 006		008	Main Plant Sandblast 2 & 3	30	2.0		9200	70	Estimate	Horizontal
8	SV 007	Active	PER 006		009	Main Plant Sandblast 1 (DC003)	16	1.03	1.25	4000	70	Manufacturer	Horizontal
9	SV 007	Removec	PER 007		009	Main Plant Sandblast 1 (DC003)	16	1.03	1.25	4000	70	Manufacturer	Horizontal
10	SV 008	Removec	PER 002		013	Emery Reclaim Dryer	33	0.83		2300	120	Manufacturer	Up, No Cap
11	SV 009	Active	PER 006		014	IA stack - South Splitters	3	1.67	2.5	100	70	Estimate	Up, No Cap
12	SV 009	Retired	PER 007		014	IA stack (South Splitters)	3	1.67	2.5	100	70	Estimate	Up, No Cap
13	SV 010	Removec	PER 006		015	South 4ft. Splitter	7	2.0			70	Estimate	Horizontal
14	SV 011	Active	PER 006		016	South Plant Tumbler (DC006GS)	15	0.83	0.83	2500	70	Estimate	Horizontal
15	SV 011	Active	PER 007		016	GS Tumbler	15	0.83	0.83	2500	70	Estimate	Horizontal
16	SV 012	Removec	PER 006		017	Main Plant Boilers	110	4.0		2300	550	Estimate	Up, No Cap
17	SV 013	Active	PER 006		018	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
18	SV 013	Retired	PER 007		018	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
19	SV 014	Active	PER 006		019	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
20	SV 014	Retired	PER 007		019	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
21	SV 015	Active	PER 006		020	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
22	SV 015	Retired	PER 007		020	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
23	SV 016	Active	PER 006		021	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
24	SV 016	Retired	PER 007		021	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
25	SV 017	Active	PER 006		022	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
26	SV 017	Retired	PER 007		022	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
27	SV 018	Active	PER 006		023	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (ºF)	Flow Rate/ Temperature Information Source	Discharge Direction
								Diameter or Length (feet)	Width (feet)				
28	SV 018	Retired	PER 007		023	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
29	SV 019	Active	PER 006		024	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
30	SV 019	Retired	PER 007		024	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
31	SV 020	Active	PER 006		025	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
32	SV 020	Retired	PER 007		025	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
33	SV 021	Active	PER 006		026	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
34	SV 021	Retired	PER 007		026	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
35	SV 022	Active	PER 006		027	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
36	SV 022	Retired	PER 007		027	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
37	SV 023	Active	PER 006		028	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
38	SV 023	Retired	PER 007		028	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
39	SV 024	Active	PER 006		029	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
40	SV 024	Retired	PER 007		029	IA stack - Radiant Heaters	11	0.33		3.05	199	Estimate	Horizontal
41	SV 025	Removec	PER 006		030	East Plant Boiler	20	1.0				Estimate	Up, No Cap
42	SV 026	Removec	PER 006		031	East Water Heaters	30	2.0	4.0			Estimate	Up, No Cap
43	SV 027	Active	PER 006		042	New Foundry Paint Booth (DC036)	27	0.42		800	70	Estimate	Up, No Cap
44	SV 027	Active	PER 007		042	Foundry Paint Booth (DC036)	27	0.42		6000	70	Estimate	Up, No Cap
45	SV 028	Active	PER 006		043	New Foundry Finishing (DC026)	37	5.0			70	Estimate	Up, No Cap
46	SV 028	Active	PER 007		043	Foundry Finishing/Shotblast (DC026)	40	5.0		75000	70	Estimate	Up, No Cap
47	SV 029	Active	PER 006		039	Monuwest North (DC021)	16	4.5	3.25	50000	70	Estimate	Up, No Cap
48	SV 029	Active	PER 007		039	Monuwest North Finishing (DC021)	38	4.5	3.25	50000	70	Estimate	Up, No Cap
49	SV 030	Active	PER 006		040	Monuwest West (DC020)	44	4.5	3.25	45000	70	Estimate	Up, No Cap
50	SV 030	Active	PER 007		040	Monuwest West Finishing (DC020)	44	4.5	3.25	45000	70	Estimate	Up, No Cap
51	SV 031	Active	PER 006		041	Granite West Shotsaw (DC032)	51	3.	3.0	60000	70	Estimate	Up, No Cap
52	SV 032	Active	PER 006		044	New Foundry Dust Collector (DC046)	30	4.8		60000	150	Estimate	*Error
53	SV 032	Active	PER 007		044	Foundry Pouring/Cooling (DC046)	40	4.8		60000	150	Estimate	Up, No Cap
54	SV 033	Active	PER 006		045	Wheelabrator Dust Collector (DC044)	18	4	4	7000	70	Estimate	*Error

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (ºF)	Flow Rate/ Temperature Information Source	Discharge Direction
								Diameter or Length (feet)	Width (feet)				
55	SV 033	Removec	PER 007		045	Wheelabrator Dust Collector (DC044)	18	4	4	7000	70	Estimate	*Error
56	SV 034	Active	PER 006		046	Sand Handling and Storage (DC047)	30	3.8		40000	70	Estimate	*Error
57	SV 034	Active	PER 007		046	Foundry Sand Handling (DC047)	40	3.8		45000	70	Estimate	Up, No Cap
58	SV 035	Active	PER 006		047	Sand Thermal Reclaim Unit (DC045)	30	2.7		19000	125	Estimate	*Error
59	SV 035	Active	PER 007		047	Foundry Sand Thermal Reclaim Unit (DC045)	40	2.7		19000	125	Estimate	Up, No Cap
60	SV 036	Removec	PER 006		032	Old Foundry Furnaces, Pouring/Cooling	27	3.75		24000	77	Test	Up, No Cap
61	SV 037	Removec	PER 006		033	Old Foundry Shakeout/Reclaim/Shot Blast	65	2.5		22000	76	Test	Up, No Cap
62	SV 038	Removec	PER 002		038	Old Foundry Sand Handling	23	0.67		1150	90	Estimate	Up, With Cap
63	SV 039	Removec	PER 006		036	Old Foundry Silo Sand	22	0.75	1.5	138	70	Manufacturer	Down
64	SV 040	Removec	PER 006		037	Old Foundry Roof Sand	39	0.75	1.5	80	70	Manufacturer	Down
65	SV 041	Active	PER 006			Monuwest Generator Stack	45	0.33		1112	1157	Estimate	Up, No Cap
66	SV 041	Active	PER 007			Monuwest Emergency Generator Stack	45	0.33		1112	1157	Manufacturer	Up, No Cap
67	SV 042	Active	PER 006			Foundry Lacquer Booth (DC049)	27	2		6500	70	Estimate	Up, unknown Cap
68	SV 042	Active	PER 007			Foundry Lacquer Booth (DC049)	27	2		6500	70	Estimate	Up, No Cap
69	SV 043	Active	PER 006			Monuwest 6 Highlight Panel Filter Station	43.5	3.08		15000	70	Estimate	Up, No Cap
70	SV 043	Active	PER 007			Monuwest 6 Highlight Panel Filter Station	43.5	1.5	1.5	15000	70	Estimate	Up, No Cap
71	SV 044	Active	PER 006			Monuwest 1 Hightlight Panel Filter Station	43.5	2.08		2800	70	Estimate	Up, No Cap
72	SV 044	Active	PER 007			Monuwest 1 Hightlight Panel Filter Station	43.5	1		1700	70	Estimate	Up, No Cap
73	SV 045	Active	PER 006			Support Services Dust Collector	15	4	4	45000	70	Estimate	Up, No Cap
74	SV 045	Active	PER 007			Support Services Dust Collector	15	4	4	45000	70	Estimate	Horizontal
75	SV 046	Active	PER 006			Support Services Emergency Generator	10	0.4167		1102	1161	Estimate	Up, No Cap
76	SV 046	Active	PER 007			Support Services Emergency Generator	10	0.4167		1102	1161	Manufacturer	Up, No Cap
77	SV 047	Active	PER 006			Monuwest Emergency Generator	45	0.5		2450	1002	Estimate	Up, No Cap
78	SV 047	Active	PER 007			Monuwest Emergency Generator	45	0.5		2450	1002	Manufacturer	Up, No Cap
79	SV 048	Active	PER 007			Water Reclaim Emergency Generator	5	0.33		1000	1000	Estimate	Up, No Cap
80	SV 049	Active	PER 007			Foundry Gas-fired Generator	1	.0125		15	800	Estimate	Horizontal
81	SV 050	Active	PER 007			Paint Curing Oven	30	1		500	300	Estimate	Up, No Cap

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: FUGITIVE SOURCES (FS)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Fugitive Source Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Pollutant(s) Emitted	Control Equip. ID No(s).	Fugitive Source Description	Year Installed	Year Removed
1	FS 001	Active	PER 007		☐		PM10 PM2.5 PM		Aggregate processing		
2	FS 002	Active	PER 007		☐		PM PM2.5 PM10		Unpaved haul roads		

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: GROUPS (GP)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Group Status	Added By (Action)	Retired By (Action)	Include in EI	Operator ID for Item	Group Description	Group Items
1	GP 001	Active	PER 002		☐		Foundry VOC Sources	EU 057, EU 059, EU 063, EU 065, EU 066, EU 095, EU 096, EU 097, EU 098, EU 103
2	GP 001	Retired	PER 007		☐		Foundry VOC Sources	EU 059, EU 063, EU 065, EU 066, EU 095, EU 096, EU 097, EU 098, EU 103
3	GP 002	Active	PER 003		☐		HAP Sources	EU 001, EU 002, EU 003, EU 057, EU 059, EU 063, EU 065, EU 066, EU 093, EU 095, EU 096, EU 097, EU 098, EU 103
4	GP 002	Retired	PER 007		☐		HAP Sources	EU 002, EU 003, EU 057, EU 059, EU 063, EU 065, EU 066, EU 093, EU 095, EU 096, EU 097, EU 098, EU 103
5	GP 003	Active	PER 004		☐		Main Plant Sandblast Operations	CE 017, CE 018, CE 019, EU 009, EU 010, EU 011, EU 012, EU 071, EU 072, EU 073, EU 074, EU 075, EU 076
6	GP 003	Retired	PER 007		☐		Main Plant Sandblast Operations	
7	GP 004	Active	PER 004		☐		Monuwest North and West Finishing Equipment	CE 024, CE 025, EU 054, EU 055
8	GP 004	Retired	PER 007		☐		Monuwest North and West Finishing Equipment	
9	GP 005	Active	PER 004		☐		Main Plant Cutting Operations	CE 017, CE 018, EU 007, EU 008
10	GP 005	Retired	PER 007		☐		Main Plant Cutting Operations	
11	GP 006	Active	PER 004		☐		Shot Saws (Controlled)	CE 026, EU 056, EU 088, EU 089, EU 090, EU 091, EU 092, EU 104, EU 105, EU 106, EU 107, EU 108, EU 109
12	GP 006	Retired	PER 007		☐		Shot Saws (Controlled)	
13	GP 007	Active	PER 004		☐		Sand Handling & Storage - New Foundry	CE 012, CE 014, CE 031, EU 059, EU 063, EU 064, EU 065, EU 095, EU 097, EU 098, EU 099, EU 100, EU 101, EU 102
14	GP 007	Retired	PER 007		☐		Sand Handling & Storage - New Foundry	CE 014, CE 031, EU 059, EU 063, EU 064, EU 065, EU 095, EU 097, EU 098, EU 099, EU 100, EU 101, EU 102
15	GP 008	Active	PER 004		☐		New Foundry Wheelabrators	CE 013, EU 061, EU 062
16	GP 008	Retired	PER 007		☐		New Foundry Wheelabrators	
17	GP 009	Active	PER 004		☐		New Foundry Melting/Pouring/Cooling	CE 012, EU 060, EU 066, EU 068, EU 069, EU 070
18	GP 009	Retired	PER 007		☐		New Foundry Melting/Pouring/Cooling	EU 060, EU 066, EU 068, EU 069, EU 070
19	GP 010	Active	PER 001		☐		group not used in PER001	
20	GP 010	Retired	PER 007		☐		group not used in PER001	
21	GP 011	Removed	PER 004		☐		Sand Handling & Storage - Old Foundry (controlled)	EU 083, EU 084, EU 087, EU 093
22	GP 012	Removed	PER 004		☐		Old Foundry Melting/Pouring/Cooling	EU 078, EU 079, EU 080
23	GP 013	Active	PER 001		☐		Existing Indirect Heating Equipment	EU 032, EU 033
24	GP 013	Retired	PER 007		☐		Existing Indirect Heating Equipment	
25	GP 014	Active	PER 001		☐		New Indirect Heating Equipment	EU 043, EU 044, EU 067
26	GP 014	Retired	PER 007		☐		New Indirect Heating Equipment	
27	GP 015	Active	PER 001		☐		Baghouse Requirements	CE 011, CE 012, CE 013, CE 014, CE 017, CE 018, CE 019, CE 021, CE 024, CE 025, CE 031

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: GROUPS (GP)

Show: Active and Pending Records
Action: PER 007
AQD Facility ID: 14500067
Facility Name: Cold Spring Granite Co

	ID No.	Group Status	Added By (Action)	Retired By (Action)	Include in EI	Operator ID for Item	Group Description	Group Items
28	GP 015	Retired	PER 007		☐		Baghouse Requirements	CE 012, CE 013, CE 014, CE 017, CE 018, CE 019, CE 021, CE 024, CE 025, CE 031
29	GP 016	Active	PER 001		☐		Scrubber Requirements	CE 026
30	GP 016	Retired	PER 007		☐		Scrubber Requirements	CE 026
31	GP 017	Removed	PER 004		☐		Old foundry sources (GI-07 use only)	EU 078, EU 079, EU 081, EU 082, EU 083, EU 084, EU 085, EU 087, EU 093
32	GP 018	Active	PER 007		☐		PM Limits	EU 003, EU 029, EU 054, EU 055, EU 057, EU 059, EU 060, EU 063, EU 065, EU 066, EU 068, EU 069, EU 070, EU 094, EU 095, EU 096, EU 097, EU 103, EU 110, EU 111, EU 112, EU 113, EU 114, EU 115, EU 116, EU 117, EU 118, EU 119, EU 120, EU 122, EU 123, EU 124, EU 125, EU 126, EU 127, EU 128, EU 129
33	GP 019	Active	PER 007		☐		VOC Limit	EU 003, EU 057, EU 059, EU 063, EU 065, EU 094, EU 095, EU 097, EU 103, EU 110, EU 111, EU 112, EU 113, EU 114, EU 115, EU 116, EU 117, EU 118, EU 119, EU 122, EU 123, EU 124, EU 125, EU 126, EU 127, EU 128, EU 129
34	GP 020	Active	PER 007		☐		NOX Limit	EU 094, EU 096, EU 110, EU 111, EU 112, EU 113, EU 114, EU 115, EU 116, EU 117, EU 122, EU 123, EU 124, EU 126, EU 127, EU 128, EU 129
35	GP 021	Active	PER 007		☐		HAP Limits	EU 003, EU 057, EU 059, EU 060, EU 063, EU 065, EU 066, EU 068, EU 069, EU 070, EU 095, EU 097, EU 103, EU 118, EU 119, EU 125
36	GP 022	Active	PER 007		☐		Coating Operations	CE 015, CE 023, CE 032, CE 033, CE 034, EU 003, EU 057, EU 103, EU 118, EU 119, EU 125, SV 003, SV 027, SV 042, SV 043, SV 044
37	GP 023	Active	PER 007		☐		Monuwest Finishing Operations	CE 024, CE 025, EU 054, EU 055, SV 029, SV 030
38	GP 024	Active	PER 007		☐		Sand Handling Operations	CE 014, EU 059, EU 063, EU 065, EU 095, EU 097, SV 034
39	GP 025	Active	PER 007		☐		Foundry Melting/Pouring/Cooling	CE 012, EU 060, EU 066, EU 068, EU 069, EU 070, SV 032
40	GP 026	Active	PER 007		☐		Direct Heating Equipment (Significant Sources)	EU 096, EU 110, EU 111, EU 112, EU 113, EU 114, EU 115, EU 116, EU 117, EU 126, EU 127, EU 128
41	GP 027	Active	PER 007		☐		Engines	EU 094, EU 122, EU 123, EU 124, EU 129
42	GP 028	Active	PER 007		☐		Baghouse Requirements	CE 011, CE 012, CE 014, CE 022, CE 024, CE 025, CE 031, CE 035
43	GP 029	Active	PER 007		☐		Panel Filter Requirements	CE 015, CE 023, CE 032, CE 033, CE 034

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **Total Facility**

	NC/ CA	Type	Citation	Requirement
1.0		CD	Minn. R. 7007.0800, subp. 2	Permit Appendices: This permit contains appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in the appendices.
2.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	This permit establishes limits on the facility to keep it a minor source under New Source Review and Part 70. The Permittee cannot make any change at the source that would make the source a major source under New Source Review or Part 70 until a permit amendment has been issued. This includes changes that might otherwise qualify as insignificant modifications and minor or moderate amendments.
3.0		CD	hdr	OPERATIONAL REQUIREMENTS
4.0		CD	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080	The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.
5.0		CD	Minn. R. 7011.0020	Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.
6.0		CD	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)	Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.
7.0		CD	Minn. R. 7007.0800, subps. 14 and 16(J)	Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.
8.0		CD	Minn. R. 7019.1000, subp. 4	Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.
9.0		CD	Minn. R. 7011.0150	Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.
10.0		CD	Minn. R. 7030.0010 - 7030.0080	Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.
11.0		CD	Minn. R. 7007.0800, subp. 9(A)	Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).
12.0		CD	Minn. R. 7007.0800, subp. 16	The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.
13.0		CD	hdr	PERFORMANCE TESTING
14.0		CD	Minn. R. ch. 7017	Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

15.0		CD	Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2	Performance Test Notifications and Submittals: Performance Tests are due as outlined in Table A of the permit. See Table B for additional testing requirements. Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test The Notification, Test Plan, and Test Report may be submitted in an alternative format as allowed by Minn. R. 7017.2018.
16.0		CD	Minn. R. 7017.2025, subp. 3	Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.
17.0		CD	hdr	MONITORING REQUIREMENTS
18.0		CD	Minn. R. 7007.0800, subp. 4(D)	Monitoring Equipment Calibration: The Permittee shall calibrate all required monitoring equipment at least once every 12 months (any requirements applying to continuous emission monitors are listed separately in this permit).
19.0		CD	Minn. R. 7007.0800, subp. 4(D)	Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.
20.0		CD	hdr	RECORDKEEPING
21.0		CD	Minn. R. 7007.0800, subp. 5(C)	Recordkeeping: Retain all records at the stationary source, unless otherwise specified within this permit, for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).
22.0		CD	Minn. R. 7007.0800, subp. 5(B)	Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes.
23.0		CD	Minn. R. 7007.1200, subp. 4	If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. For nonexpiring permits, these records shall be kept for a period of five years from the date that the change was made. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.
24.0		CD	hdr	REPORTING/SUBMITTALS
25.0		CD	Minn. R. 7019.1000, subp. 3	Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

26.0		CD	Minn. R. 7019.1000, subp. 2	Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.
27.0		CD	Minn. R. 7019.1000, subp. 1	Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.
28.0		CD	Minn. R. 7019.1000, subp. 1	Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.
29.0		S/A	Minn. R. 7007.0800, subp. 6(A)(2)	Semiannual Deviations Report: due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.
30.0		CD	Minn. R. 7007.1150 - 7007.1500	Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.
31.0		CD	Minn. R. 7007.1400, subp. 1(H)	Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H). Performance testing deadlines from the General Provisions of 40 CFR pt. 60 and pt. 63 are examples of deadlines for which the MPCA does not have authority to grant extensions and therefore do not meet the requirements of Minn. R. 7007.1400, subp. 1(H).
32.0		S/A	Minn. R. 7007.0800, subp. 6(C)	Compliance Certification: due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). The Permittee shall submit this to the Commissioner on a form approved by the Commissioner. This report covers all deviations experienced during the calendar year.
33.0		CD	Minn. R. 7019.3000 - 7019.3100	Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance, to be submitted on a form approved by the Commissioner.
34.0		CD	Minn. R. 7002.0005 - 7002.0095	Emission Fees: due 60 days after receipt of an MPCA bill.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **GP 018 PM Limits**

Associated Items: EU 003 Support Services Paint Room
EU 029 Tumbler (DC006)
EU 054 Monuwest Finishing (North DC021)
EU 055 Monuwest Finishing (West DC020)
EU 057 Foundry Paint Booth (DC036)
EU 059 Foundry Shakeout (MS002)
EU 060 Foundry Induction Furnace #1 (FR008)
EU 063 Foundry Mixer East (SM002)
EU 065 Foundry Vibra Mill #1 (VM003)
EU 066 Pouring and Cooling (CV 0032, 0035, 0051, 0053)
EU 068 Foundry Induction Furnace #2 (FR009)
EU 069 Foundry Induction Furnace #3 (FR010)
EU 070 Foundry Induction Furnace #4 (FR011)
EU 094 Monuwest Diesel Generator
EU 095 Foundry VibraMill #2 (VM002)
EU 096 Foundry Thermal Reclaim (SR002)
EU 097 Foundry Sand Mixer #2 (SM005)
EU 103 Foundry Lacquer Booth (DC049) Sprayer #1
EU 110 Shot Saw Area Makeup Air Heater
EU 111 Shot Saw Area Makeup Air Heater
EU 112 Monuwest Makeup Air Heater (HE001)
EU 113 Monuwest Makeup Air Heater (HE002)
EU 114 Monuwest Makeup Air Heater (HE003)
EU 115 Foundry Makeup Air Heater (HE013)
EU 116 Foundry Makeup Air Heater (HE017)
EU 117 Foundry Makeup Air Heater (HE018)
EU 118 Monuwest 5 Highlite Panel Filter Stations
EU 119 Monuwest 1 Highlite Panel Filter Station
EU 120 Foundry Finishing
EU 122 Support Services Natural Gas Generator
EU 123 Monuwest Diesel Generator
EU 124 Water Reclaim Diesel Generator
EU 125 Lacquer Finish Booth (DC049) Sprayer #2
EU 126 HE 025 Hastings space heater - north
EU 127 HE 026 Weather Rite space heater - north
EU 128 Paint Curing Oven
EU 129 Foundry Emergency Generator

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000	Total Particulate Matter: less than or equal to 71.5 tons/year using 12-month Rolling Sum calculated as described below.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

3.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	PM < 10 micron: less than or equal to 71.5 tons/year using 12-month Rolling Sum calculated as described below.
4.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	PM < 2.5 micron: less than or equal to 71.5 tons/year using 12-month Rolling Sum calculated as described below.
5.0		CD	hdr	RECORDKEEPING REQUIREMENTS
6.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the total PM emissions for the previous month, using the following equation: PM = PM(EU029) + PM(EU096) + PM(EU120) + PM(GP022) + PM(GP023) + PM(GP024) + PM(GP025) + PM(GP026) + PM(GP027) PM(EUxxx) and PM(GPxxx) are calculated and described under the Subject Items "EUxxx" and "GPxxx."
7.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the total PM10 emissions for the previous month, using the following equation: PM10 = PM10(EU029) + PM10(EU096) + PM10(EU120) + PM10(GP022) + PM10(GP023) + PM10(GP024) + PM10(GP025) + PM10(GP026) + PM10(GP027) PM10(EUxxx) and PM10(GPxxx) are calculated and described under the Subject Items "EUxxx" and "GPxxx."
8.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the total PM2.5 emissions for the previous month, using the following equation: PM2.5 = PM2.5(EU029) + PM2.5(EU096) + PM2.5(EU120) + PM2.5(GP022) + PM2.5(GP023) + PM2.5(GP024) + PM2.5(GP025) + PM2.5(GP026) + PM2.5(GP027) PM2.5(EUxxx) and PM2.5(GPxxx) are calculated and described under the Subject Items "EUxxx" and "GPxxx."
9.0		CD	Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the 12 month rolling sum of PM emissions, by summing the PM emissions calculated for each of the previous 12 months.
10.0		CD	Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the 12 month rolling sum of PM10 emissions, by summing the PM10 emissions calculated for each of the previous 12 months.
11.0		CD	Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the 12 month rolling sum of PM2.5 emissions, by summing the PM2.5 emissions calculated for each of the previous 12 months.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **GP 019 VOC Limit**

Associated Items: EU 003 Support Services Paint Room
EU 057 Foundry Paint Booth (DC036)
EU 059 Foundry Shakeout (MS002)
EU 063 Foundry Mixer East (SM002)
EU 065 Foundry Vibra Mill #1 (VM003)
EU 094 Monuwest Diesel Generator
EU 095 Foundry VibraMill #2 (VM002)
EU 097 Foundry Sand Mixer #2 (SM005)
EU 103 Foundry Lacquer Booth (DC049) Sprayer #1
EU 110 Shot Saw Area Makeup Air Heater
EU 111 Shot Saw Area Makeup Air Heater
EU 112 Monuwest Makeup Air Heater (HE001)
EU 113 Monuwest Makeup Air Heater (HE002)
EU 114 Monuwest Makeup Air Heater (HE003)
EU 115 Foundry Makeup Air Heater (HE013)
EU 116 Foundry Makeup Air Heater (HE017)
EU 117 Foundry Makeup Air Heater (HE018)
EU 118 Monuwest 5 Highlite Panel Filter Stations
EU 119 Monuwest 1 Highlite Panel Filter Station
EU 122 Support Services Natural Gas Generator
EU 123 Monuwest Diesel Generator
EU 124 Water Reclaim Diesel Generator
EU 125 Lacquer Finish Booth (DC049) Sprayer #2
EU 126 HE 025 Hastings space heater - north
EU 127 HE 026 Weather Rite space heater - north
EU 128 Paint Curing Oven
EU 129 Foundry Emergency Generator

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Volatile Organic Compounds: less than or equal to 85.0 tons/year using 12-month Rolling Sum calculated as described below.
3.0		CD	hdr	RECORDKEEPING REQUIREMENTS
4.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the total VOC emissions for the previous month, using the following equation: VOC = VOC(GP022) + VOC(GP024) + VOC(GP026) + VOC(GP027) Values of VOC(GPxxx) are calculated and described under the Subject Items "GPxxx."
5.0		CD	Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the 12 month rolling sum of VOC emissions, by summing the VOC emissions calculated for each of the previous 12 months.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **GP 020 NOX Limit**

Associated Items: EU 094 Monuwest Diesel Generator
EU 096 Foundry Thermal Reclaim (SR002)
EU 110 Shot Saw Area Makeup Air Heater
EU 111 Shot Saw Area Makeup Air Heater
EU 112 Monuwest Makeup Air Heater (HE001)
EU 113 Monuwest Makeup Air Heater (HE002)
EU 114 Monuwest Makeup Air Heater (HE003)
EU 115 Foundry Makeup Air Heater (HE013)
EU 116 Foundry Makeup Air Heater (HE017)
EU 117 Foundry Makeup Air Heater (HE018)
EU 122 Support Services Natural Gas Generator
EU 123 Monuwest Diesel Generator
EU 124 Water Reclaim Diesel Generator
EU 126 HE 025 Hastings space heater - north
EU 127 HE 026 Weather Rite space heater - north
EU 128 Paint Curing Oven
EU 129 Foundry Emergency Generator

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Nitrogen Oxides: less than or equal to 73.0 tons/year using 12-month Rolling Sum calculated as described below.
3.0		CD	hdr	RECORDKEEPING REQUIREMENTS
4.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the total VOC emissions for the previous month, using the following equation: NOX = NOX(GP026) + NOX(GP027) Values of NOX(GPxxx) are calculated and described under the Subject Items "GPxxx."
5.0		CD	Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the 12 month rolling sum of NOX emissions, by summing the NOX emissions calculated for each of the previous 12 months.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **GP 021 HAP Limits**

Associated Items: EU 003 Support Services Paint Room

EU 057 Foundry Paint Booth (DC036)

EU 059 Foundry Shakeout (MS002)

EU 060 Foundry Induction Furnace #1 (FR008)

EU 063 Foundry Mixer East (SM002)

EU 065 Foundry Vibra Mill #1 (VM003)

EU 066 Pouring and Cooling (CV 0032, 0035, 0051, 0053)

EU 068 Foundry Induction Furnace #2 (FR009)

EU 069 Foundry Induction Furnace #3 (FR010)

EU 070 Foundry Induction Furnace #4 (FR011)

EU 095 Foundry VibraMill #2 (VM002)

EU 097 Foundry Sand Mixer #2 (SM005)

EU 103 Foundry Lacquer Booth (DC049) Sprayer #1

EU 118 Monuwest 5 Highlite Panel Filter Stations

EU 119 Monuwest 1 Highlite Panel Filter Station

EU 125 Lacquer Finish Booth (DC049) Sprayer #2

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	HAPs - Total: less than or equal to 20.5 tons/year using 12-month Rolling Sum calculated as described below.
3.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Xylenes (mixed isomers): less than or equal to 8.5 tons/year using 12-month Rolling Sum calculated as described below.
4.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Methyl isobutyl ketone: less than or equal to 8.5 tons/year using 12-month Rolling Sum calculated as described below.
5.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Ethylbenzene: less than or equal to 9.0 tons/year using 12-month Rolling Sum calculated as described below.
6.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Toluene: less than or equal to 9.0 tons/year using 12-month Rolling Sum calculated as described below.
7.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Benzene: less than or equal to 9.0 tons/year using 12-month Rolling Sum calculated as described below.

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8.0		CD	hdr	RECORDKEEPING REQUIREMENTS
9.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2; Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the total HAP (THAP) emissions for the previous month, using the following equation: THAP = THAP(GP022) + THAP(GP024) + THAP(GP025) Values of THAP(GPxxx) are calculated and described under the Subject Items "GPxxx."
10.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2; Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the total emissions of xylenes (mixed isomers) for the previous month, using the following equation: Xylene = IHAP(GP022) + IHAP(GP024) + IHAP(GP025) using the "IHAP(GPxxx)" values calculated for xylenes at Subject Items GP022, GP024, and GP025.
11.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2; Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the total Benzene emissions for the previous month, using the following equation: Benzene = IHAP(GP022) + IHAP(GP024) + IHAP(GP025) using the "IHAP(GPxxx)" values calculated for benzene at Subject Items GP022, GP024, and GP025.
12.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2; Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the total Ethylbenzene emissions for the previous month, using the following equation: Ethylbenzene = IHAP(GP022) + IHAP(GP024) + IHAP(GP025) using the "IHAP(GPxxx)" values calculated for ethylbenzene at Subject Items GP022, GP024, and GP025.
13.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2; Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the total Toluene emissions for the previous month, using the following equation: Toluene = IHAP(GP022) + IHAP(GP024) + IHAP(GP025) using the "IHAP(GPxxx)" values calculated for toluene at Subject Items GP022, GP024, and GP025.
14.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 63.2; Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the total Methyl Isobutyl Kotone emissions for the previous month, using the following equation: Methyl Isobutyl Ketone = IHAP(GP022) + IHAP(GP024) + IHAP(GP025) using the "IHAP(GPxxx)" values calculated for methyl isobutyl ketone at Subject Items GP022, GP024, and GP025.
15.0		CD	Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the 12 month rolling sum of total HAP emissions, by summing the THAP emissions calculated for each of the previous 12 months.
16.0		CD	Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the 12 month rolling sum of Xylene emissions, by summing the Xylene emissions calculated for each of the previous 12 months.
17.0		CD	Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the 12 month rolling sum of Toluene emissions, by summing the Toluene emissions calculated for each of the previous 12 months.
18.0		CD	Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the 12 month rolling sum of Benzene emissions, by summing the Benzene emissions calculated for each of the previous 12 months.
19.0		CD	Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the 12 month rolling sum of Ethylbenzene emissions, by summing the Ethylbenzene emissions calculated for each of the previous 12 months.
20.0		CD	Minn. R. 7007.0800, subps. 4 and 5	By the 15th day of each month, calculate and record the 12 month rolling sum of Methyl Isobutyl Ketone emissions, by summing the Methyl Isobutyl Ketone emissions calculated for each of the previous 12 months.

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Subject Item: **GP 022 Coating Operations**

Associated Items: CE 015 Mat or Panel Filter

CE 023 Mat or Panel Filter

CE 032 Mat or Panel Filter

CE 033 Mat or Panel Filter

CE 034 Mat or Panel Filter

EU 003 Support Services Paint Room

EU 057 Foundry Paint Booth (DC036)

EU 103 Foundry Lacquer Booth (DC049) Sprayer #1

EU 118 Monuwest 5 Highlite Panel Filter Stations

EU 119 Monuwest 1 Highlite Panel Filter Station

EU 125 Lacquer Finish Booth (DC049) Sprayer #2

SV 003 Support Services Paint Room

SV 027 Foundry Paint Booth (DC036)

SV 042 Foundry Lacquer Booth (DC049)

SV 043 Monuwest 6 Highlight Panel Filter Station

SV 044 Monuwest 1 Hightlight Panel Filter Station

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Minn. R. 7011.0715, subp. 1(A)	Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This applies individually to each emission unit (EUxxx) listed as an Associated Item.
3.0		LIMIT	Minn. R. 7011.0715, subp. 1(B)	Opacity: less than or equal to 20 percent opacity . This applies individually to each emission unit (EUxxx) listed as an Associated Item.
4.0		CD	hdr	CONTROL REQUIREMENTS (See Also GP029)
5.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subps. 2 and 14	The Permittee shall operate and maintain the panel filter any time that any process equipment controlled by the panel filters is(are) in operation. The Permittee shall document periods of non-operation of the control equipment. See GP029 for specific operating requirements.
6.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7011.0070, subp. 1(A)	The Permittee shall operate and maintain the control equipment on EU003, EU103, and EU125 such that it achieves an overall control efficiency (capture efficiency x panel control efficiency), for Total Particulate Matter: greater than or equal to 85 percent control efficiency
7.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7011.0070, subp. 1(A)	The Permittee shall operate and maintain the control equipment on EU003, EU103, and EU125 such that it achieves an overall control efficiency (capture efficiency x panel control efficiency), for PM < 10 micron: greater than or equal to 85 percent control efficiency

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8.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7011.0070, subp. 1(A)	The Permittee shall operate and maintain the control equipment on EU057, EU118, and EU119 such that it achieves an overall control efficiency (capture efficiency x panel control efficiency), for Total Particulate Matter: greater than or equal to 68 percent control efficiency
9.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7011.0070, subp. 1(A)	The Permittee shall operate and maintain the control equipment on EU057, EU118, and EU119 such that it achieves an overall control efficiency (capture efficiency x panel control efficiency), for PM < 10 micron: greater than or equal to 68 percent control efficiency
10.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7011.0070, subp. 1(A)	EU003 Paint Booth Total Enclosure: The Permittee shall close the paint booth doors prior to and during any coating application in order to achieve a total enclosure.
11.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7011.0070, subp. 1(A)	EU003 Paint Booth Total Enclosure Monitoring and Recordkeeping: The Permittee shall keep a log of all EU003 coating activities to demonstrate the booth doors are closed during all coating application. Each person that applies coating in EU003 shall make a daily log entry on the date the coatings are applied. The log shall be dated and signed by each person, and shall confirm if the booth doors were closed during all coating applications make by that person on that date. Failure to close the doors during coating appication is a deviation that must be reported on the semi-annual deviation report requirement in Table B.
12.0		CD	hdr	Calculation Of Emissions To Be Used At GP018, GP019, and GP020
13.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Daily Recordkeeping: On each day of operation, the Permittee shall calculate and record the total quantity of all coatings and other VOC and HAP containing materials used in the emission units (EUxxx) listed as Associated Items. This shall be based on written usage logs.
14.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Recordkeeping - By the 15th day of each month, the Permittee shall calculate and record: 1) The total usage of VOC containing materials for the previous calendar month using the daily usage records. This record shall also include the VOC, solids, and individual HAP contents of each material used, as determined by the Material Content Requirement of this permit. 2) The total quantity of VOC containing materials shipped out as waste for the previous calendar month.
15.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Material Content. VOC, HAPs, and Solids contents in coating materials shall be determined by the Material Safety Data Sheet (MSDS) provided by the supplier for each material used. If a material content range is given on the MSDS, the highest number in the range shall be used in all compliance calculations. When using the MSDS as the basis of calculating particulate emissions, the conservative assumption is made that PM consists entirely of PM less than 10 microns or less than 2.5 microns. Other alternative methods approved by the MPCA may be used to determine the VOC, HAPs, and solids contents. The Commissioner reserves the right to require the Permittee to determine the VOC, HAP, and solids contents of any material, according to EPA or ASTM reference methods. If an EPA or ASTM reference method is used for material content determination, the data obtained shall supersede the MSDS.

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16.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Waste Credit: If the Permittee elects to obtain credit for HAPs, solids, and/or VOC shipped in waste materials, the Permittee shall either use item 1 or 2 to determine the VOC, solids, and/or total and individual HAP content for each credited shipment. 1) The Permittee shall analyze a composite sample of each waste shipment to determine the weight content of VOC, solids, total HAP, and each individual HAP, excluding water. 2) The Permittee may use supplier data for raw materials to determine the VOC, solids, and total and individual HAP contents of each waste shipment, using the same content data used to determine the content of raw materials. If the waste contains several materials, the content of mixed waste shall be assumed to be the lowest VOC, solids, and total and individual HAP content of any of the materials.
17.0		CD	Minn. R. 7005.0100, subp. 35a	Maximum Contents of Materials: The Permittee assumed certain worst-case contents of materials when determining the short term potential to emit of units in GP022. These assumptions are listed in Appendix E of this permit. Changing to a material that has a higher content of any of the given pollutants is considered a change in method of operation that must be evaluated under Minn. R. 7007.1200, subp. 3 to determine if a permit amendment or notification is required under Minn. R. 7007.1150.
18.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Recordkeeping - By the 15th day of each month, the Permittee shall calculate and record the VOC, individual HAP, Total HAP, and PM emissions for the previous month (VOC(GP022), IHAP(GP022), THAP(GP022), and PM(GP022)), using the daily usage records and the calculations below. It can be assumed that PM2.5 = PM10 = PM, and therefore PM(GP022) = PM10(GP022) = PM2.5(GP022). These calculated values will be used in the calculations required by GP018, GP019, and GP020.
19.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- VOC Emissions. The Permittee shall calculate VOC emissions in tons per month using the following equations: VOC(GP022) = V - W V = (A1 x B1) + (A2 x B2) + (A3 x B3) + ... W = (C1 x D1) + (C2 x D2) + C3 x D3) + ...
20.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly VOC Emissions Calculation Continued: where: V = total VOC used in tons/month; A# = amount of each VOC-containing material used, in tons/month; B# = weight percent VOC in A#, as a fraction; W = the amount of VOC shipped in waste, in tons/month; C# = amount, in tons/month, of each VOC-containing waste material shipped. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero; and D# = weight percent of VOC in C#, as a fraction.
21.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- Individual HAP Emissions. The Permittee shall calculate each individual HAP emissions in tons per month using the following equations: IHAP(GP022) = H - W H = (A1 x B1) + (A2 x B2) + (A3 x B3) + ... W = (C1 x D1) + (C2 x D2) + (C3 x D3) + ...

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22.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly HAP Emissions Calculation Continued: Where: H = the amount of each pollutant (each individual HAP), used, in tons/month. A# = Amount of each HAP-containing material used in the previous month, in tons/month. B# = weight percent of each individual or total HAP in A#, as a fraction (e.g., 50% is 0.50). W = the amount of each pollutant (each individual HAP) shipped in waste, in tons/month. C# = amount, in tons/month, of each HAP-containing waste material shipped. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero. D# = weight percent of each individual or total HAP in C#, as a fraction.
23.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- Particulate Emissions. The Permittee shall calculate particulate emissions (it is assumed that PM = PM10 = PM2.5) in tons per month using the following equations: PM(GP022) = PM10(GP022) = PM2.5(GP022) = S(1-CE)(1-TE) - W S = (A1 x B1) + (A2 x B2) + (A3 x B3) + ... W = (C1 x D1) + (C2 x D2) + (C3 x D3) + ...
24.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Particulate Emissions Calculation Continued: Where: S = total solids used in tons/month; CE = overall control efficiency, as a fraction. This shall be 0.85 for EU003/CE015, and 0.68 for all other spray booths/controls; TE = transfer efficiency, as a fraction. This shall be 0.70 for EU057, EU103, and EU125, and shall be 0.75 for EU003, EU118 and EU119, unless otherwise approved by the MPCA in writing. A# = amount of each solids-containing material sprayed, in tons/month; B# = weight percent solids in A#, as a fraction; W = the amount of solids shipped in waste, in tons/month; C# = amount, in tons/month, of each solids-containing waste material shipped. If the Permittee chooses to not take credit for waste shipments, this parameter would be zero; and D# = weight percent of solids in C#, as a fraction.
25.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Calculation -- Total HAP Emissions: Montly calculations of the Total HAP (THAP(GP022)) emissions shall be calculated by summing all of the individual HAP (IHAP(GP022)) calculated using the formulas specified in this permit.

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Subject Item: **GP 023 Monuwest Finishing Operations**

Associated Items: CE 024 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 025 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 054 Monuwest Finishing (North DC021)

EU 055 Monuwest Finishing (West DC020)

SV 029 Monuwest North Finishing (DC021)

SV 030 Monuwest West Finishing (DC020)

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Minn. R. 7011.0715, subp. 1(A)	Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735. This limit applies individually to each emission unit (EUxxx) listed in GP023.
3.0		LIMIT	Minn. R. 7011.0715, subp. 1(B)	Opacity: less than or equal to 20 percent opacity . This limit applies individually to each emission unit (EUxxx) listed in GP023.
4.0		CD	hdr	EMISSION UNIT DESCRIPTION & RECORDKEEPING
5.0		CD	Minn. R. 7007.0800, subp. 5	EU054 includes several sandblasting units from which emissions are collected and routed to a baghouse (CE024) exhausting to the atmosphere. EU055 includes several pieces of cutting and finishing equipment from which emissions are collected and routed to a baghouse (CE025). Finishing equipment from which emissions are not collected or for which collected emissions are exhausted inside the building are considered insignificant activities and are not included in EU054 or EU055.
6.0		CD	Minn. R. 7007.0800, subp. 5 and 11	PM/PM10/PM2.5 PreCap: The Permittee may make changes to the cutting and finishing equipment, provided the changes are in compliance with all permit requirements. If the Permittee replaces, adds, or modifies a PM-emitting operation classified as EU054 or EU055, such equipment is subject to the PM and opacity limits listed above, as well as all of the requirements of GP023. Prior to making such a change, the Permittee shall apply for and obtain the appropriate permit amendment, as applicable. For modifications that solely involve equipment covered by the PM/PM10/PM2.5 PreCap, the Permittee is not required to complete PM/PM10/PM2.5 calculations described in Minn. R. 7007.1200, subp. 2. A permit amendment will still be needed regardless of the emissions increase if the change will be subject to a new applicable requirement or requires revisions to the limits or monitoring and recordkeeping in this permit, including changes to emission calculations required by GP023.
7.0		CD	Minn. R. 7007.0800, subp. 5	Recordkeeping: The Permittee shall keep a complete description of each piece of equipment described by EU054 and EU055 at any time. The description shall include the manufacturer, model number, capacity, date of original installation, and how the emissions are characterized and included in the calculations of PM(GP023), PM10(GP023), and PM2.5(GP023) (for example, if the emissions will be included in the calculation segment for sandblasting, polishing, or splitters.). The description shall also identify each piece of equipment using a unique identification (ID) number.
8.0		CD	hdr	CONTROL REQUIREMENTS (See Also GP028)
9.0		CD	Minn. R. 7011.0065, subp. 2(A)	The Permittee shall operate and maintain each fabric filter at all times that any process equipment controlled by the fabric filter is operating.
10.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for Total Particulate Matter: greater than or equal to 79.2 percent control efficiency
11.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for PM < 10 micron: greater than or equal to 74.4 percent control efficiency
12.0		CD	hdr	Calculation Of Emissions To Be Used At GP018

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13.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Monthly Recordkeeping: By the 15th day of each month, the Permittee shall calculate and record the total quantity of the following: 1) the pounds of abrasives use in the north sandblast operation (A) 2) the square feet of granite hand polished (B) 3) the tons of granite split (C) 4) the number of markers sandblasted (D)
14.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Recordkeeping - By the 15th day of each month, the Permittee shall calculate and record the PM and PM10 emissions for the previous month (PM(GP023) and PM10(GP023)), using the monthly usage records and the calculations below. It can be assumed that PM2.5 = PM10, and therefore PM10(GP023) = PM2.5(GP023). These calculated values will be used in the calculations required by GP018.
15.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM Emissions The Permittee shall calculate PM emissions in tons per month using the following equation: PM(GP023) = { [(A x EF(A) / 1000) + (D x EF(D))] x 0.01 x 0.0005} + { [(B x EF(B)) + (C x EF(C))] x 0.208 x 0.0005} (continued below)
16.0		CD	Minn. R. 7007.0800, subps. 4 and 5	(Monthly PM calculations continued) Where: A, B, C, and D are as defined above EF(A) = 91 lb/1000 lb of abrasive EF(B) = 0.048 lb/square feet of hand polished granite EF(C) = 0.0054 lb/ton of granite split EF(D) = 0.49 lb/marker 0.01 = 1 - overall control efficiency of the fabric filter on the sandblasting operations 0.208 = 1- overall control efficiency of the fabric filter on the other operations 0.0005 = 1 ton/2000 lb
17.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM10 and PM2.5 Emissions The Permittee shall calculate PM10 emissions in tons per month using the following equation: PM10(GP023) = PM2.5(GP023) PM10(GP023) = { [(A x EF(A) / 1000) + (D x EF(D))] x 0.07 x 0.0005} + { [(B x EF(B)) + (C x EF(C))] x 0.256 x 0.0005} (continued below)
18.0		CD	Minn. R. 7007.0800, subps. 4 and 5	(Monthly PM10 calculations continued) Where: A, B, C, and D are as defined above EF(A) = 13 lb/1000 lb of abrasive EF(B) = 0.048 lb/square feet of hand polished granite EF(C) = 0.0054 lb/ton of granite split EF(D) = 0.49 lb/marker 0.07 = 1 - overall control efficiency of the fabric filter on the sandblasting operations 0.256 = 1- overall control efficiency of the fabric filter on the other operations 0.0005 = 1 ton/2000 lb

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Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **GP 024 Sand Handling Operations**

Associated Items: CE 014 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 059 Foundry Shakeout (MS002)

EU 063 Foundry Mixer East (SM002)

EU 065 Foundry Vibra Mill #1 (VM003)

EU 095 Foundry VibraMill #2 (VM002)

EU 097 Foundry Sand Mixer #2 (SM005)

SV 034 Foundry Sand Handling (DC047)

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Minn. R. 7011.0715, subp. 1(A)	Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735. This limit applies individually to each emission unit (EUxxx) listed in GP024.
3.0		LIMIT	Minn. R. 7011.0715, subp. 1(B)	Opacity: less than or equal to 20 percent opacity . This limit applies individually to each emission unit (EUxxx) listed in GP024.
4.0		CD	hdr	CONTROL REQUIREMENTS (See Also GP028)
5.0		CD	Minn. R. 7011.0065, subp. 2(A)	The Permittee shall operate and maintain each fabric filter at all times that any process equipment controlled by the fabric filter is operating.
6.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for Total Particulate Matter: greater than or equal to 79.2 percent control efficiency
7.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for PM < 10 micron: greater than or equal to 74.4 percent control efficiency
8.0		CD	hdr	Calculation Of Emissions To Be Used At GP018, GP019, and GP020
9.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Daily Recordkeeping: On each day of operation, the Permittee shall calculate and record the total quantity of the following: 1) the tons of metal charged (An) 2) the tons of sand through EU063 (Bn) 3) the tons of sand through EU097 (Cn) 4) the tons of sand through EU065 (Dn) 5) the tons of sand through EU095 (En) 6) the quantity of VOC and/or HAP containing materials used in the sand mixers, including the VOC content and HAP content for each individual HAP
10.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Recordkeeping - By the 15th day of each month, the Permittee shall calculate and record the VOC, PM, PM10, individual HAP, and total HAP emissions for the previous month (VOC(GP024), PM(GP024), PM10(GP024), lHAP(GP024), and THAP(GP024)), using the daily usage records and the calculations below. It can be assumed that PM2.5 = PM10, and therefore PM10(GP024) = PM2.5(GP024). These calculated values will be used in the calculations required by GP018, GP019, and GP020.
11.0		CD	Minn. R. 7007.0800, subp. 4 and 5	VOC and HAP Content: The VOC and HAP content of all materials shall be determined by the Material Safety Data Sheet (MSDS) or Certificate of Analysis (COA) provided by the supplier of each material used. If the MSDS or COA gives the VOC and HAP content as a range, the highest humber in the range shall be used for all permit calculations. Alternative methods approved by the MPCA may be used to determine the VOC and HAP content. The MPCA reserves the right to require the Permittee to determine the VOC and HAP content of any material according to EPA and/or ASTM reference methods. If an EPA or ASTM reference method is used for material content determination, the data obtained shall supersede the MSDS or COA data. A copy of the MSDS, COA, or other record of the VOC and HAP content shall be kept at the facility.

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12.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM Emissions The Permittee shall calculate PM emissions in tons per month using the following equation: PM(GP024) = { [(A x EF(A)] x 0.208 x 0.0005} + { [(B + C + D + E) x EF(B)] x 0.01 x 0.0005} Where: A = the sum of all individual An values recorded during the previous month B = the sum of all individual Bn values recorded during the previous month C = the sum of all individual Cn values recorded during the previous month D = the sum of all individual Dn values recorded during the previous month E = the sum of all individual En values recorded during the previous month An, Bn, Cn, Dn, and En are as defined above EF(A) = 3.2 lb/ton of metal charged EF(B) = 3.6 lb/ton of sand 0.208 = 1 - overall control efficiency of the fabric filter on the shakeout operation 0.01 = 1- overall control efficiency of the fabric filter on the other operations 0.0005 = 1 ton/2000 lb
13.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM10 and PM2.5 Emissions The Permittee shall calculate PM10 emissions in tons per month using the following equation: PM10(GP024) = PM2.5(GP024) PM10(GP024) = { [(A x EF(A)] x 0.256 x 0.0005} + { [(B + C + D + E) x EF(B)] x 0.07 x 0.0005} Where: A = the sum of all individual An values recorded during the previous month B = the sum of all individual Bn values recorded during the previous month C = the sum of all individual Cn values recorded during the previous month D = the sum of all individual Dn values recorded during the previous month E = the sum of all individual En values recorded during the previous month An, Bn, Cn, Dn, and En are as defined above EF(A) = 2.24 lb/ton of metal charged EF(B) = 0.54 lb/ton of sand 0.256 = 1 - overall control efficiency of the fabric filter on the shakeout operation 0.07 = 1- overall control efficiency of the fabric filter on the other operations 0.0005 = 1 ton/2000 lb
14.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Calculation -- VOC Emissions (EU063 and EU097 only) Monthly emissions of VOC shall be calculated in tons per month as follows: VOC(GP024) = [(R1 x VR1 x VER1 / 2000) + (R2 x VR2 x VER2 / 2000) + ... etc.] + [(C1 x VC1 x VEC1 / 2000) + (C2 x VC2 x VEC2 / 2000) ... etc.]
15.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly VOC calculations, continued Where: R1, R2, etc. = the quantity of resin used in each binder formula during the previous month (pounds) VR1, VR2, etc. = the VOC content of the resin in each binder formula used during the previous month (VOC, weight percent) VER1, VER2, etc. = the evaporation rate of the VOC for the resin in each binder formula used during the previous month (percent) (See Note 1) C1, C2, etc. = the quantity of catalyst used in each binder formula during the previous month (pounds) VC1, VC2, etc. = the VOC content of the catalyst in each binder formula used during the previous month (VOC, weight percent) VEC1, VEC2, etc. = the evaporation rate of VOC for the catalyst in each binder formula used during the previous month (percent) (See Note 1)

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16.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Calculation -- Individual HAP Emissions (EU063 and EU097 only) Monthly emissions of each individual HAP shall be calculated in tons per month as follows: IHAP(GP024) = [(R1 x HR1 x HER1 / 2000) + (R2 x HR2 x HER2 / 2000) + ... etc.] + [(C1 x HC1 x HEC1 / 2000) + (C2 x HC2 x HEC2 / 2000) ... etc.]
17.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Individual HAP calculations, continued Where: R1, R2, etc. = the quantity of resin used in each binder formula during the previous month (pounds) HR1, HR2, etc. = the HAP content of the resin in each binder formula used during the previous month (individual HAP, weight percent) HER1, HER2, etc. = the evaporation rate of the individual HAP for the resin in each binder formula used during the previous month (percent) (See Note 1) C1, C2, etc. = the quantity of catalyst used in each binder formula during the previous month (pounds) HC1, HC2, etc. = the HAP content of the catalyst in each binder formula used during the previous month (individual HAP, weight percent) HEC1, HEC2, etc. = the evaporation rate of the individual HAP for the catalyst in each binder formula used during the previous month (percent) (See Note 1)
18.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Calculation -- Total HAP Emissions: Montly calculations of the Total HAP (THAP(GP024)) emissions shall be calculated by summing all of the individual HAP (IHAP(GP024)) calculated using the formulas specified in this permit.
19.0		CD	Minn. R. 7007.0800, subp. 4 and 5	NOTE 1: Evaporation rates for individual HAPs from resins and catalysts shall be those provided in manufacturer's data; if manufacturer's data is not available, use the rates provided in Appendix C (from "Form R Reporting of Binder Chemicals Used in Foundries□, Second Edition (1998), published by the American Foundrymen□s Society, Inc. and the Casting Industry Suppliers Association). If manufacturer's data is used, the Permittee shall keep a record of the data and all supporting documentation. Any changes to the evaporation rate shall be submitted to the MPCA with the annual compliance certification. If no evaporation rate data is available, an evaporation rate of 50% shall be used. The Permittee may propose to use a resin or catalyst-specific evaporation rate derived from MCPA approved performance tests. If approved by the MPCA, this resin or catalyst-specific evaporation rate shall be used.

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Subject Item: **GP 025 Foundry Melting/Pouring/Cooling**

Associated Items: CE 012 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

EU 060 Foundry Induction Furnace #1 (FR008)

EU 066 Pouring and Cooling (CV 0032, 0035, 0051, 0053)

EU 068 Foundry Induction Furnace #2 (FR009)

EU 069 Foundry Induction Furnace #3 (FR010)

EU 070 Foundry Induction Furnace #4 (FR011)

SV 032 Foundry Pouring/Cooling (DC046)

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Minn. R. 7011.0715, subp. 1(A)	Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735. This limit applies individually to each emission unit (EUxxx) listed in GP025.
3.0		LIMIT	Minn. R. 7011.0715, subp. 1(B)	Opacity: less than or equal to 20 percent opacity . This limit applies individually to each emission unit (EUxxx) listed in GP025.
4.0		CD	hdr	CONTROL REQUIREMENTS (See Also GP028)
5.0		CD	Minn. R. 7011.0065, subp. 2(A)	The Permittee shall operate and maintain the fabric filter at all times that any process equipment controlled by the fabric filter is operating.
6.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for Total Particulate Matter: greater than or equal to 79.2 percent control efficiency
7.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for PM < 10 micron: greater than or equal to 74.4 percent control efficiency
8.0		CD	hdr	Calculation Of Emissions To Be Used At GP018 and GP020
9.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Daily Recordkeeping: On each day of operation, the Permittee shall calculate and record the total tons of metal charged in the furnaces (An).
10.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Recordkeeping - By the 15th day of each month, the Permittee shall calculate and record the PM, PM10, individual HAP, and total HAP emissions for the previous month (PM(GP025), PM10(GP025), IHAP(GP025), and THAP(GP025)), using the daily usage records and the calculations below. It can be assumed that PM2.5 = PM10, and therefore PM10(GP025) = PM2.5(GP025). These calculated values will be used in the calculations required by GP018 and GP020.
11.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM Emissions The Permittee shall calculate PM emissions in tons per month using the following equation: PM(GP025) = (A x 5.586) x 0.208 x 0.0005 A = the total tons of metal charged during the previous month, = the sum of all values of An (defined above) recorded each day during the previous month 5.586 = the total emission factor for melting + pouring/cooling, in lb/ton of metal charged 0.208 = 1 - overall control efficiency of the fabric filter on the charging and pouring operations 0.0005 = 1 ton/2000 lb

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12.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM10 Emissions The Permittee shall calculate PM10 (assumed = PM2.5) emissions in tons per month using the following equation: PM10(GP025) = PM2.5(GP025) PM10(GP025) = (A x 3.198) x 0.256 x 0.0005 A = the total tons of metal charged during the previous month, = the sum of all values of An (defined above) recorded each day during the previous month 3.198 = the total emission factor for melting + pouring/cooling, in lb/ton of metal charged 0.256 = 1 - overall control efficiency of the fabric filter on the charging and pouring operations 0.0005 = 1 ton/2000 lb
13.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Calculation -- Individual HAP Emissions The Permittee shall calculate the following individual HAP emissions in tons per month using the following equations: Lead: IHAP(GP025) = A x 0.135 x 0.0005 Antimony: IHAP(GP025) = A x 0.0092 x 0.0005 Nickel: IHAP(GP025) = A x 0.0368 x 0.0005 A = the total tons of metal charged during the previous month, = the sum of all values of An (defined above) recorded each day during the previous month 0.135 = the total lead emission factor for melting + pouring/cooling, in lb/ton of metal charged 0.0092 = the total antimony emission factor for melting + pouring/cooling, in lb/ton of metal charged 0.0368 = the total nickel emission factor for melting + pouring/cooling, in lb/ton of metal charged 0.0005 = 1 ton/2000 lb
14.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Calculation -- Total HAP Emissions: Montly calculations of the Total HAP (THAP(GP025)) emissions shall be calculated by summing all of the individual HAP (IHAP(GP025)) calculated using the formulas specified in this permit.

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Permit Number: 14500067 - 007

Subject Item: **GP 026 Direct Heating Equipment (Significant Sources)**

Associated Items: EU 096 Foundry Thermal Reclaim (SR002)
EU 110 Shot Saw Area Makeup Air Heater
EU 111 Shot Saw Area Makeup Air Heater
EU 112 Monuwest Makeup Air Heater (HE001)
EU 113 Monuwest Makeup Air Heater (HE002)
EU 114 Monuwest Makeup Air Heater (HE003)
EU 115 Foundry Makeup Air Heater (HE013)
EU 116 Foundry Makeup Air Heater (HE017)
EU 117 Foundry Makeup Air Heater (HE018)
EU 126 HE 025 Hastings space heater - north
EU 127 HE 026 Weather Rite space heater - north
EU 128 Paint Curing Oven

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION AND OPERATING LIMITS
2.0		LIMIT	Minn. R. 7011.0610, subp. 1(A)(1)	Total Particulate Matter: less than or equal to 0.30 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735. This limit applies individually to each emission unit (EUxxx) listed in GP026.
3.0		LIMIT	Minn. R. 7011.0610, subp. 1(A)(2)	Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. This limit applies individually to each emission unit (EUxxx) listed in GP026.
4.0		CD	Minn. R. 7005.0100, subp. 35a	Fuel type: Natural gas and propane only, by design.
5.0		CD	hdr	Calculation Of Emissions To Be Used At GP018, GP019, and GP021
6.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Monthly Recordkeeping: By the 15th day of each month, the Permittee shall calculate and record the total quantities of natural gas (A, in million cubic feet (mmcf)) and propane (B, in 1000 gallons (Mgal)), combusted in the units listed in GP026. For purposes of this requirement, records may be based on monthly utility readings and delivery invoices. It may be assumed that the monthly utility reading minus the previous utility reading equals the natural gas combusted during the month. It may be assumed that the quantity of propane delivered during any month based on delivery invoices reflects the quantity of propane combusted during that month (if no propane deliveries are received during the month, it may be assumed that no propane was combusted during the month).
7.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Recordkeeping - By the 15th day of each month, the Permittee shall calculate and record the PM, NOX and VOC emissions for the previous month (PM(GP026), NOX(GP026), and VOC(GP026), using the daily usage records and the calculations below. It can be assumed that PM2.5 = PM10 = PM, and therefore PM(GP026) = PM10(GP026) = PM2.5(GP026). These calculated values will be used in the calculations required by GP018, GP019, and GP021.

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8.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM Emissions The Permittee shall calculate PM emissions in tons per month using the following equation: PM(GP026) = PM10(GP026) = PM2.5(GP026) PM(GP026) = [(A x 7.6) + (B x 0.7)] x 0.0005 A = the total quantity of natural gas combusted during the previous month, as described above 7.6 = the emission factor for natural gas combustion, in lb/mmcf of gas B = the total quantity of propane combusted during the previous month, as described above 0.7 = the emission factor for propane combustion, in lb/Mgal of propane 0.0005 = 1 ton/2000 lb
9.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- VOC Emissions The Permittee shall calculate VOC emissions in tons per month using the following equation: VOC(GP026) = [(A x 5.5) + (B x 1.0)] x 0.0005 A = the total quantity of natural gas combusted during the previous month, as described above 5.5 = the emission factor for natural gas combustion, in lb/mmcf of gas B = the total quantity of propane combusted during the previous month, as described above 1.0 = the emission factor for propane combustion, in lb/Mgal of propane 0.0005 = 1 ton/2000 lb
10.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Calculation -- NOX Emissions: he Permittee shall calculate VOC emissions in tons per month using the following equation: NOX(GP026) = [(A x 100) + (B x 13)] x 0.0005 A = the total quantity of natural gas combusted during the previous month, as described above 100 = the emission factor for natural gas combustion, in lb/mmcf of gas B = the total quantity of propane combusted during the previous month, as described above 13 = the emission factor for propane combustion, in lb/Mgal of propane 0.0005 = 1 ton/2000 lb

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Subject Item: **GP 027 Engines**

Associated Items: EU 094 Monuwest Diesel Generator

EU 122 Support Services Natural Gas Generator

EU 123 Monuwest Diesel Generator

EU 124 Water Reclaim Diesel Generator

EU 129 Foundry Emergency Generator

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION AND OPERATING LIMITS
2.0		LIMIT	Minn. R. 7011.2300, subp. 2	Sulfur Dioxide: less than or equal to 0.50 lbs/million Btu heat input This limit applies individually to each emission unit (EUxxx) listed in GP026.
3.0		LIMIT	Minn. R. 7011.2300, subp. 1	Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained. This limit applies individually to each emission unit (EUxxx) listed in GP027.
4.0		CD	Minn. R. 7005.0100, subp. 35a	Fuel type (EU094, EU123, and EU124): Diesel fuel only, by design.
5.0		CD	Minn. R. 7005.0100, subp. 35a	Fuel type (EU122 and EU129): Natural Gas/Propane only, by design.
6.0		CD	hdr	Calculation Of Emissions To Be Used At GP018, GP019, and GP021
7.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Weekly Recordkeeping: Once each calendar week, the Permittee shall calculate and record the hours of operation of each engine listed in GP027 during the previous calendar week, as follows: An = weekly hours of operation of EU094 Bn = weekly hours of operation of EU122 Cn = weekly hours of operation of EU123 Dn = weekly hours of operation of EU124 En = weekly hours of operation of EU129
8.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Recordkeeping: By the 15th day of each month, the Permittee shall calculate and record the total hours of operation of each engine during the previous month, where: A = sum of all values of An recorded during the previous month. B = sum of all values of Bn recorded during the previous month C = sum of all values of Cn recorded during the previous month D = sum of all values of Dn recorded during the previous month E = sum of all values of En recorded during the previous month "Previous Month" shall include each calendar week ending during the calendar month.
9.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Recordkeeping - By the 15th day of each month, the Permittee shall calculate and record the PM, NOX and VOC emissions for the previous month (PM(GP027), NOX(GP027), and VOC(GP027), using the daily and monthly hours records and the calculations below. It can be assumed that PM2.5 = PM10 = PM, and therefore PM(GP027) = PM10(GP027) = PM2.5(GP027). These calculated values will be used in the calculations required by GP018, GP019, and GP021.

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10.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM Emissions The Permittee shall calculate PM emissions in tons per month using the following equation: PM(GP027) = PM10(GP027) = PM2.5(GP027) PM(GP027) = [(A x 0.482) + (B x 0.020) + (C x 0.660) + (D x 0.440) + (E x 0.001)] x 0.0005 A, B, C, D, and E are as defined above. 0.482 = the potential hourly PM emission rate* of EU094 0.020 = the potential hourly PM emission rate* of EU122 0.660 = the potential hourly PM emission rate* of EU123 0.440 = the potential hourly PM emission rate* of EU124 0.001 = the potential hourly PM emission rate* of EU129 0.0005 = 1 ton/2000 lb * based on equipment capacity, allowed fuels, and AP-42 emission factors for the allowed fuels
11.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- VOC Emissions The Permittee shall calculate VOC emissions in tons per month using the following equation: VOC(GP027) = [(A x 0.541) + (B x 0.242) + (C x 0.741) + (D x 0.494) + (E x 0.008)] x 0.0005 A, B, C, D, and E are as defined above. 0.541 = the potential hourly VOC emission rate* of EU094 0.242 = the potential hourly VOC emission rate* of EU122 0.741 = the potential hourly VOC emission rate* of EU123 0.494 = the potential hourly VOC emission rate* of EU124 0.008 = the potential hourly VOC emission rate* of EU129 0.0005 = 1 ton/2000 lb * based on equipment capacity, allowed fuels, and AP-42 emission factors for the allowed fuels
12.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Calculation -- NOX Emissions: The Permittee shall calculate NOX emissions in tons per month using the following equation: NOX(GP027) = [(A x 6.789) + (B x 8.371) + (C x 9.30) + (D x 6.20) + (E x 0.269)] x 0.0005 A, B, C, D, and E are as defined above. 6.789 = the potential hourly NOX emission rate* of EU094 8.371 = the potential hourly NOX emission rate* of EU122 9.30 = the potential hourly NOX emission rate* of EU123 6.20 = the potential hourly NOX emission rate* of EU124 0.269 = the potential hourly NOX emission rate* of EU129 0.0005 = 1 ton/2000 lb

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Permit Number: 14500067 - 007

Subject Item: **GP 028 Baghouse Requirements**

Associated Items: CE 011 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 012 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 014 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 022 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 024 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 025 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 031 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 035 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION AND OPERATIONAL LIMITS
2.0		CD	Minn. R. 7007.0800, subp. 14	The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.
3.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 6.0 inches of water column (CE011, CE012, CE025), unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.
4.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Pressure Drop: greater than or equal to 2.0 inches of water column and less than or equal to 6.0 inches of water column (CE014, CE024, CE031), unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.
5.0		LIMIT	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 6.0 inches of water column (CE035), unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change.
6.0		CD	hdr	MONITORING AND RECORDKEEPING
7.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Visible Emissions: The Permittee shall check each fabric filter stack (SV028 for CE011, SV032 for CE012, SV034 for CE014, SV011 for CE022, SV028 for CE024, SV029 for CE025, SV035 for CE031, and SV045 for CE035) for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across each fabric filter, once each day of operation.
8.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit.
9.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	The control equipment is considered listed control equipment under Minn. R. 7011.0060 to 7011.0080. The Permittee shall operate and maintain the fabric filter at all times that any process equipment controlled by the fabric filter is operating. The Permittee shall document periods of non-operation of the control equipment.

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Facility Name: Cold Spring Granite Co

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10.0		CD	Minn. R. 7007.0800, subps. 4, 5, and 14	Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.
11.0		CD	Minn. R. 7007.0800, subp. 4	Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.
12.0		CD	Minn. R. 7007.0800, subps. 4, 5 and 14	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.
13.0		CD	Minn. R. 7007.0800, subps. 4, 5 and 14	Initial Hood Certification and Evaluation: The control device hood must conform to the requirements listed in Minn. R. 7011.0072, subp. 2(B), and the Permittee shall maintain a copy of the evaluation and certification on site. (This applies to any fabric filter where the collection point for any emission unit does not qualify as a total enclosure.)
14.0		CD	Minn. R. 7007.0800, subps. 4, 5 and 14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow indication method. The Permittee shall maintain a copy of the annual evaluation on site. (This applies to any fabric filter where the collection point for any emission unit does not qualify as a total enclosure.)

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **GP 029 Panel Filter Requirements**

Associated Items: CE 015 Mat or Panel Filter

CE 023 Mat or Panel Filter

CE 032 Mat or Panel Filter

CE 033 Mat or Panel Filter

CE 034 Mat or Panel Filter

	NC/ CA	Type	Citation	Requirement
1.0		CD	Minn. R. 7007.0800, subp. 14	Operation and Maintenance of Filters: The Permittee shall operate and maintain each filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.
2.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subps. 4 and 5	Daily Inspections: Once each operating day, the Permittee shall visually inspect the condition of each panel filter with respect to alignment, saturation, tears, holes and any other condition that may affect the filter's performance. The Permittee shall maintain a daily written record of filter inspections.
3.0		CD	Minn. R. 7007.0800, subps. 4, 5, and 14	Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.
4.0		CD	Minn. R. 7007.0800, subps. 4, 5, and 14	Corrective Actions: If the filters or any of their components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.
5.0		CD	Minn. R. 7007.0800, subps. 4, 5 and 14	Initial Hood Certification and Evaluation: The control device hood must conform to the requirements listed in Minn. R. 7011.0072, subp. 2(B), and the Permittee shall maintain a copy of the evaluation and certification on site. (This applies to CE023, CE033, and CE034.)
6.0		CD	Minn. R. 7007.0800, subps. 4, 5 and 14	Annual Hood Evaluation: The Permittee shall measure and record at least once every 12 months the fan rotation speed, fan power draw, or face velocity of each hood, or other comparable air flow indication method. The Permittee shall maintain a copy of the annual evaluation on site. (This applies to CE023, CE033, and CE034.)

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **EU 029 Tumbler (DC006)**

Associated Items: CE 022 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

GP 018 PM Limits

SV 011 GS Tumbler

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Minn. R. 7011.0715, subp. 1(A)	Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.
3.0		LIMIT	Minn. R. 7011.0715, subp. 1(B)	Opacity: less than or equal to 20 percent opacity
4.0		CD	hdr	CONTROL REQUIREMENTS (See Also GP028)
5.0		CD	Minn. R. 7011.0065, subp. 2(A)	The Permittee shall operate and maintain the fabric filter at all times that any process equipment controlled by the fabric filter is operating.
6.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for Total Particulate Matter: greater than or equal to 99 percent control efficiency
7.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for PM < 10 micron: greater than or equal to 93 percent control efficiency
8.0		CD	hdr	Calculation Of Emissions To Be Used At GP018
9.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Daily Recordkeeping: On each day of operation, the Permittee shall calculate and record the total quantity of granite processed through EU029 (An), in tons.
10.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Recordkeeping - By the 15th day of each month, the Permittee shall calculate and record the PM and PM10 emissions for the previous month (PM(EU029) and PM10(EU029)), using the daily usage records and the calculations below. It can be assumed that PM2.5 = PM10, and therefore PM10(EU029) = PM2.5(EU029). These calculated values will be used in the calculations required by GP018.
11.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM Emissions Before Stack Testing is Completed The Permittee shall calculate PM emissions in tons per month using the following equation: PM(EU029) = (A x EF) x 0.01 x 0.0005 Where: A = the sum of all individual An values recorded during the previous month, in tons An is as defined above EF = 66 lb/ton of granite processed 0.01 = 1 - overall control efficiency of the fabric filter 0.0005 = 1 ton/2000 lb

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

12.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM Emissions After Stack Testing is Completed The Permittee shall calculate PM emissions in tons per month using the following equation: PM(EU029) = (A x EF) x 0.0005 Where: A = the sum of all individual An values recorded during the previous month, in tons An is as defined above EF = The controlled controlled emission rate demonstrated during the most recent performance test, in lb/ton of granite processed. 0.0005 = 1 ton/2000 lb
13.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM10 and PM2.5 Emissions The Permittee shall calculate PM10 emissions in tons per month using the following equation: PM10(EU029) = (A x EF) x 0.07 x 0.0005 = PM2.5(EU029) Where: A = the sum of all individual An values recorded during the previous month, in tons An is as defined above EF = 3.5 lb/ton of granite processed 0.07 = 1 - overall control efficiency of the fabric filter 0.0005 = 1 ton/2000 lb
14.0		CD	hdr	PERFORMANCE TESTING
15.0		S/A	Minn. R. 7017.2020, subp. 1	Initial Performance Test: due 180 days after Initial Startup following relocation, to measure emissions of Total Particulate Matter.
16.0		CD	Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4, Minn. R. 7017.2035, subps. 1-2	Performance Test Notifications and Submittals: Performance Tests are due as outlined in Table A of the permit. See Table B for additional testing requirements. Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test The Notification, Test Plan, and Test Report may be submitted in an alternative format as allowed by Minn. R. 7017.2018.
17.0		S/A	Minn. R. 7017.2020, subp. 1	Testing Frequency Plan: due 60 days after Initial Performance Test for Total Particulate Matter emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on 12-month, 36-month, or 60-month intervals, or as applicable, shall be required upon written approval of the MPCA.
18.0		S/A	Minn. R. 7007.0800, subp. 2	Notification of the Actual Date of Initial Startup: due 15 days after Initial Startup following relocation of the equipment.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **EU 094 Monuwest Diesel Generator**

Associated Items: GP 018 PM Limits

GP 019 VOC Limit

GP 020 NOX Limit

GP 027 Engines

SV 041 Monuwest Emergency Generator Stack

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	SUBPART ZZZZ REQUIREMENTS (See also GP027)
2.0		CD	40 CFR Section 63.6595(a)(1); Minn. R. 7011.8150	Comply with the applicable emission limitations and operating requirements of Subpart ZZZZ no later than May 3, 2013.
3.0		CD	40 CFR Section 63.6603(a); Minn. R. 7011.8150	The Permittee must change the oil and filter every 1,000 hours of operation or annually, whichever comes first.
4.0		CD	40 CFR Section 63.6603(a); Minn. R. 7011.8150	The Permittee must inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first.
5.0		CD	40 CFR Section 63.6603(a); Minn. R. 7011.8150	The Permittee must inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
6.0		CD	40 CFR Section 63.6603(a); 40 CFR Section 63.6625(h); Minn. R. 7011.8150	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
7.0		CD	40 CFR Section 63.6605(a); Minn. R. 7011.8150	The Permittee must be in compliance with the applicable emission limitations and applicable operating limitations of 40 CFR Part 63, Subpart ZZZZ, at all times.
8.0		CD	40 CFR Section 63.6605(b); Minn. R. 7011.8150	The Permittee must at all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not required the Permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieived. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
9.0		CD	40 CFR Section 63.6625(e); 40 CFR Section 63.6655(d); Minn. R. 7011.8150	The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions.
10.0		CD	40 CFR Section 63.6625(i); Minn. R. 7011.8150	The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in 40 CFR Section 63.6595(a). The oil analysis must be performed at the same frequency specified for changing the oil in 40 CFR Section 63.6595(a). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. continued below:
11.0		CD	40 CFR Section 63.6625(i); Minn. R. 7011.8150	continued from above: If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

12.0		CD	40 CFR Section 63.6640(a); Minn. R. 7011.8150	The Permittee must: - Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or - Develop and follow a permittee-developed maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
13.0		CD	40 CFR Section 63.6655(a); Minn. R. 7011.8150	The Permittee must keep the following records: (1) A copy of each notification and report submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR Section 63.10(b)(2)(xiv). (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (3) (does not apply) (4) Records of all required maintenance performed on the air pollution control and monitoring equipment. (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR Section 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
14.0		CD	40 CFR Section 63.6655(e); Minn. R. 7011.8150	The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to the maintenance plan.
15.0		CD	40 CFR Section 63.6660; Minn. R. 7011.8150	a. Records must be in a form suitable and readily available for expeditious review according to 40 CFR Section 63.10(b)(1). b. As specified in 40 CFR Section 63.10(b)(1), keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. c. Keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR Section 63.10(b)(1).
16.0		CD	40 CFR Section 63.6665; Minn. R. 7011.8150	The following parts of the general provisions apply: 40 CFR Sections 63.1-63.5; 63.6(a); 63.3(b)(1)-(5); 63.6(b)(7); 63.6(c)(1)-(2); 63.6(c)(5); 63.6(f)(2)-(3); 63.6(g)(1)-(3); 63.6(i)-(j); 63.8(a)(1)-(2); 63.8(b)(1)-(3); 63.8(c)(1)(i)-(iii); 63.8(f)(1)-(6); 63.8(g); 63.9(a); 63.9(b)(1)-(5); 63.9(c)-(d); 63.9(h)(1)-(6); 63.9(i)-(j); 63.10(a); 63.10(b)(1); 63.10(b)(2)(vi)-(xiv); 63.10(b)(3); 63.10(c); 63.10(d)(1)-(2); 63.10(d)(4); 63.10(e)(1); 63.10(e)(2)(i); 63.10(e)(3); 63.10(f); and 63.12-63.15.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **EU 096 Foundry Thermal Reclaim (SR002)**

Associated Items: CE 031 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

GP 018 PM Limits

GP 020 NOX Limit

GP 026 Direct Heating Equipment (Significant Sources)

SV 035 Foundry Sand Thermal Reclaim Unit (DC045)

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Minn. R. 7011.0715, subp. 1(A)	Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.
3.0		LIMIT	Minn. R. 7011.0715, subp. 1(B)	Opacity: less than or equal to 20 percent opacity
4.0		CD	hdr	CONTROL REQUIREMENTS (See Also GP028)
5.0		CD	Minn. R. 7011.0065, subp. 2(A)	The Permittee shall operate and maintain the fabric filter at all times that any process equipment controlled by the fabric filter is operating.
6.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for Total Particulate Matter: greater than or equal to 99 percent control efficiency
7.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for PM < 10 micron: greater than or equal to 93 percent control efficiency
8.0		CD	hdr	Calculation Of Emissions To Be Used At GP018
9.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Daily Recordkeeping: On each day of operation, the Permittee shall calculate and record the total hours of operation (An).
10.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Recordkeeping - By the 15th day of each month, the Permittee shall calculate and record the PM and PM10 emissions for the previous month (PM(EU096) and PM10(EU096)), using the daily usage records and the calculations below. It can be assumed that PM2.5 = PM10, and therefore PM10(EU096) = PM2.5(EU096). These calculated values will be used in the calculations required by GP018.
11.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM Emissions The Permittee shall calculate PM emissions in tons per month using the following equation: PM(EU096) = (A x 3 x EF) x 0.01 x 0.0005 Where: A = the sum of all individual An values recorded during the previous month, in hours An is as defined above EF = 3.6 lb/ton of sand processed 3 = the equipment capacity of 3 tons per hour 0.01 = 1 - overall control efficiency of the fabric filter 0.0005 = 1 ton/2000 lb

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

12.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM10 and PM2.5 Emissions The Permittee shall calculate PM10 emissions in tons per month using the following equation: PM10(EU096) = (A x 3 x EF) x 0.07 x 0.0005 = PM2.5(EU096) Where: A = the sum of all individual An values recorded during the previous month, in hours An is as defined above EF = 0.54 lb/ton of granite processed 3 = the equipment capacity of 3 tons per hour 0.07 = 1 - overall control efficiency of the fabric filter 0.0005 = 1 ton/2000 lb

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **EU 120 Foundry Finishing**

Associated Items: CE 011 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

GP 018 PM Limits

SV 028 Foundry Finishing/Shotblast (DC026)

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Minn. R. 7011.0715, subp. 1(A)	Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.
3.0		LIMIT	Minn. R. 7011.0715, subp. 1(B)	Opacity: less than or equal to 20 percent opacity
4.0		CD	hdr	CONTROL REQUIREMENTS (See Also GP028)
5.0		CD	Minn. R. 7011.0065, subp. 2(A)	The Permittee shall operate and maintain the fabric filter at all times that any process equipment controlled by the fabric filter is operating.
6.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for Total Particulate Matter: greater than or equal to 79.2 percent control efficiency
7.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for PM < 10 micron: greater than or equal to 74.4 percent control efficiency
8.0		CD	hdr	Calculation Of Emissions To Be Used At GP018 and GP021
9.0		CD	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21 and Minn. R. 7007.3000; To avoid classification as a major source under 40 CFR Section 70.2 and Minn. R. 7007.0200	Daily Recordkeeping: On each day of operation, the Permittee shall calculate and record the total quantity of metal processed through EU120 (An), in tons.
10.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Recordkeeping - By the 15th day of each month, the Permittee shall calculate and record the PM, PM10, individual HAP, and total HAP emissions for the previous month (PM(EU120), PM10(EU120), IHAP(EU120) and THAP(EU120)), using the daily usage records and the calculations below. It can be assumed that PM2.5 = PM10, and therefore PM10(EU120) = PM2.5(EU120). These calculated values will be used in the calculations required by GP018 and GP021.
11.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM Emissions The Permittee shall calculate PM emissions in tons per month using the following equation: PM(EU120) = (A x EF) x (1 - 0.792) x 0.0005 Where: A = the sum of all individual An values recorded during the previous month, in tons An is as defined above EF = 17 lb/ton of metal processed 0.792 = overall control efficiency of the fabric filter 0.0005 = 1 ton/2000 lb

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

12.0		CD	Minn. R. 7007.0800, subps. 4 and 5	Monthly Calculation -- PM10 and PM2.5 Emissions The Permittee shall calculate PM10 emissions in tons per month using the following equation: PM10(EU120) = (A x EF) x (1 - 0.744) x 0.0005 = PM2.5(EU120) Where: A = the sum of all individual An values recorded during the previous month, in tons An is as defined above EF = 1.7 lb/ton of metal processed 0.744 = overall control efficiency of the fabric filter 0.0005 = 1 ton/2000 lb
13.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Calculation -- Individual HAP Emissions The Permittee shall calculate the following individual HAP emissions in tons per month using the following equations: Lead: IHAP(EU120) = A x 0.425 x 0.0005 A = the sum of all individual An values recorded during the previous month, in tons 0.425 = the total lead emission, in lb/ton of metal charged 0.0005 = 1 ton/2000 lb
14.0		CD	Minn. R. 7007.0800, subp. 4 and 5	Monthly Calculation -- Total HAP Emissions: Montly calculations of the Total HAP (THAP(EU120)) emissions shall be calculated by summing all of the individual HAP (IHAP(EU120)) calculated using the formulas specified in this permit.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **EU 121 Diamond Dept/Support Services**

Associated Items: CE 035 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 045 Support Services Dust Collector

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	Minn. R. 7011.0715, subp. 1(A)	Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.
3.0		LIMIT	Minn. R. 7011.0715, subp. 1(B)	Opacity: less than or equal to 20 percent opacity
4.0		CD	hdr	CONTROL REQUIREMENTS (See Also GP028)
5.0		CD	Minn. R. 7011.0065, subp. 2(A)	The Permittee shall operate and maintain the fabric filter at all times that any process equipment controlled by the fabric filter is operating.
6.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for Total Particulate Matter: greater than or equal to 79.2 percent control efficiency
7.0		LIMIT	Minn. R. 7011.0065, subp. 1(A)	The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency (capture efficiency x collection efficiency) for PM < 10 micron: greater than or equal to 74.4 percent control efficiency

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **EU 122 Support Services Natural Gas Generator**

Associated Items: GP 018 PM Limits

GP 019 VOC Limit

GP 020 NOX Limit

GP 027 Engines

SV 046 Support Services Emergency Generator

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	SUBPART ZZZZ REQUIREMENTS (See also GP027)
2.0		CD	40 CFR Section 63.6595(a)(1); Minn. R. 7011.8150	Comply with the applicable emission limitations and operating requirements of Subpart ZZZZ no later than May 3, 2013.
3.0		CD	40 CFR Section 63.6603(a); Minn. R. 7011.8150	The Permittee must change the oil and filter every 1,440 hours of operation or annually, whichever comes first.
4.0		CD	40 CFR Section 63.6603(a); Minn. R. 7011.8150	The Permittee must inspect the spark plugs every 1,440 hours of operation or annually, whichever comes first.
5.0		CD	40 CFR Section 63.6603(a); Minn. R. 7011.8150	The Permittee must inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.
6.0		CD	40 CFR Section 63.6605(a); Minn. R. 7011.8150	The Permittee must be in compliance with the applicable emission limitations and applicable operating limitations of 40 CFR Part 63, Subpart ZZZZ, at all times.
7.0		CD	40 CFR Section 63.6605(b); Minn. R. 7011.8150	The Permittee must at all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not required the Permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieived. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
8.0		CD	40 CFR Section 63.6625(e); 40 CFR Section 63.6655(d); Minn. R. 7011.8150	The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions.
9.0		CD	40 CFR Section 63.6625(h); Minn. R. 7011.8150	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
10.0		CD	40 CFR Section 63.6625(i); Minn. R. 7011.8150	The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in 40 CFR Section 63.6595(a). The oil analysis must be performed at the same frequency specified for changing the oil in 40 CFR Section 63.6595(a). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. continued below:
11.0		CD	40 CFR Section 63.6625(i); Minn. R. 7011.8150	continued from above: If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

12.0		CD	40 CFR Section 63.6640(a); Minn. R. 7011.8150	The Permittee must: - Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or - Develop and follow a permittee-developed maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
13.0		CD	40 CFR Section 63.6655(a); Minn. R. 7011.8150	The Permittee must keep the following records: (1) A copy of each notification and report submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR Section 63.10(b)(2)(xiv). (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (3) (does not apply) (4) Records of all required maintenance performed on the air pollution control and monitoring equipment. (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR Section 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
14.0		CD	40 CFR Section 63.6655(e); Minn. R. 7011.8150	The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to the maintenance plan.
15.0		CD	40 CFR Section 63.6660; Minn. R. 7011.8150	a. Records must be in a form suitable and readily available for expeditious review according to 40 CFR Section 63.10(b)(1). b. As specified in 40 CFR Section 63.10(b)(1), keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. c. Keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR Section 63.10(b)(1).
16.0		CD	40 CFR Section 63.6665; Minn. R. 7011.8150	The following parts of the general provisions apply: 40 CFR Sections 63.1-63.5; 63.6(a); 63.3(b)(1)-(5); 63.6(b)(7); 63.6(c)(1)-(2); 63.6(c)(5); 63.6(f)(2)-(3); 63.6(g)(1)-(3); 63.6(i)-(j); 63.8(a)(1)-(2); 63.8(b)(1)-(3); 63.8(c)(1)(i)-(iii); 63.8(f)(1)-(6); 63.8(g); 63.9(a); 63.9(b)(1)-(5); 63.9(c)-(d); 63.9(h)(1)-(6); 63.9(i)-(j); 63.10(a); 63.10(b)(1); 63.10(b)(2)(vi)-(xiv); 63.10(b)(3); 63.10(c); 63.10(d)(1)-(2); 63.10(d)(4); 63.10(e)(1); 63.10(e)(2)(i); 63.10(e)(3); 63.10(f); and 63.12-63.15.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **EU 123 Monuwest Diesel Generator**

Associated Items: GP 018 PM Limits

GP 019 VOC Limit

GP 020 NOX Limit

GP 027 Engines

SV 047 Monuwest Emergency Generator

	NC/ CA	Type	Citation	Requirement
1.0		CD	placeholder	subject to NSPS Subpart IIII & NESHAP Subpart ZZZZ
2.0		LIMIT	40 CFR Section 60.4204(b); 40 CFR Section 63.6590(c)(1); Minn. R. 7011.8150; Minn. R. 7011.3520	Carbon Monoxide: less than or equal to 3.5 grams/kilowatt-hour as specified in 40 CFR Section 89.112(a)
3.0		LIMIT	40 CFR Section 60.4204(b); 40 CFR Section 63.6590(c)(1); Minn. R. 7011.8150; Minn. R. 7011.3520	Total Particulate Matter: less than or equal to 0.20 grams/kilowatt-hour as specified in 40 CFR Section 89.112(a)
4.0		LIMIT	40 CFR Section 60.4204(b); 40 CFR Section 63.6590(c)(1); Minn. R. 7011.8150; Minn. R. 7011.3520	NMHC+NOx: less than or equal to 4.0 grams/kilowatt-hour as specified in 40 CFR Section 89.112(a)
5.0		LIMIT	40 CFR Section 60.4204(b); 40 CFR Section 63.6590(c)(1); Minn. R. 7011.8150; Minn. R. 7011.3520	Opacity: less than or equal to 20 percent opacity during acceleration mode, as specified in 40 CFR Section 89.113(a)(1).
6.0		LIMIT	40 CFR Section 60.4204(b); 40 CFR Section 63.6590(c)(1); Minn. R. 7011.8150; Minn. R. 7011.3520	Opacity: less than or equal to 15 percent opacity during lugging mode, as specified in 40 CFR Section 89.113(a)(2).
7.0		LIMIT	40 CFR Section 60.4204(b); 40 CFR Section 63.6590(c)(1); Minn. R. 7011.8150; Minn. R. 7011.3520	Opacity: less than or equal to 50 percent opacity during peaks in the acceleration or lugging modes, as specified in 40 CFR Section 89.113(a)(3).
8.0		CD	40 CFR Section 60.4204(b); 40 CFR Section 63.6590(c)(1); Minn. R. 7011.8150; Minn. R. 7011.3520	Do not discharge crankcase emissions into the ambient atmosphere, unless such crankcase emissions are permanently routed into the exhaust and included in all exhaust emission measurements. This provision applies to all Tier 2 engines and later models. This provision does not apply to engines using turbochargers, pumps, blowers, or superchargers for air induction. (40 CFR Section 89.112(e)).
9.0		CD	40 CFR Section 60.4206; 40 CFR Section 63.6590(c)(1); Minn. R. 7011.8150; Minn. R. 7011.3520	Operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR Section 60.4204 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.
10.0		CD	40 CFR Section 60.4207(b); 40 CFR Section 63.6590(c)(1); Minn. R. 7011.8150; Minn. R. 7011.3520	Beginning June 1, 2010, diesel fuel must meet the requirements of 40 CFR Section 80.510(b). All NR and LM diesel fuel is subject to the following per-gallon standards: (1) Sulfur content: (i) 15 ppm maximum for NR diesel fuel and/or (ii) 500 ppm maximum for LM diesel fuel; and (2) Cetane index or aromatic content: (i) a minimum cetane index of 40, or (ii) a maximum aromatic content of 35 volume percent.
11.0		CD	40 CFR Section 60.4209; 40 CFR Section 60.4211(a); 40 CFR Section 63.6590(c)(1); Minn. R. 7011.8150; Minn. R. 7011.3520	Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. Also meet the applicable requirements of 40 CFR parts 89 and 1068.
12.0		CD	40 CFR Section 60.4209; 40 CFR Section 60.4211(c); 40 CFR Section 63.6590(c)(1); Minn. R. 7011.8150; Minn. R. 7011.3520	you must comply by purchasing an engine certified to the emission standards in 40 CFR Section 60.4204(b), or 40 CFR Section 60.4205(b) or (c), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **EU 124 Water Reclaim Diesel Generator**

Associated Items: GP 018 PM Limits

GP 019 VOC Limit

GP 020 NOX Limit

GP 027 Engines

SV 048 Water Reclaim Emergency Generator

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	SUBPART ZZZZ REQUIREMENTS (See also GP027)
2.0		CD	40 CFR Section 63.6595(a)(1); Minn. R. 7011.8150	Comply with the applicable emission limitations and operating requirements of Subpart ZZZZ no later than May 3, 2013.
3.0		CD	40 CFR Section 63.6603(a); Minn. R. 7011.8150	The Permittee must change the oil and filter every 1,000 hours of operation or annually, whichever comes first.
4.0		CD	40 CFR Section 63.6603(a); Minn. R. 7011.8150	The Permittee must inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first.
5.0		CD	40 CFR Section 63.6603(a); Minn. R. 7011.8150	The Permittee must inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
6.0		CD	40 CFR Section 63.6603(a); 40 CFR Section 63.6625(h); Minn. R. 7011.8150	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
7.0		CD	40 CFR Section 63.6605(a); Minn. R. 7011.8150	The Permittee must be in compliance with the applicable emission limitations and applicable operating limitations of 40 CFR Part 63, Subpart ZZZZ, at all times.
8.0		CD	40 CFR Section 63.6605(b); Minn. R. 7011.8150	The Permittee must at all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not required the Permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieived. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
9.0		CD	40 CFR Section 63.6625(e); 40 CFR Section 63.6655(d); Minn. R. 7011.8150	The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions.
10.0		CD	40 CFR Section 63.6625(i); Minn. R. 7011.8150	The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in 40 CFR Section 63.6595(a). The oil analysis must be performed at the same frequency specified for changing the oil in 40 CFR Section 63.6595(a). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. continued below:
11.0		CD	40 CFR Section 63.6625(i); Minn. R. 7011.8150	continued from above: If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

COMPLIANCE PLAN CD-01

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Permit Number: 14500067 - 007

12.0		CD	40 CFR Section 63.6640(a); Minn. R. 7011.8150	The Permittee must: - Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or - Develop and follow a permittee-developed maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
13.0		CD	40 CFR Section 63.6655(a); Minn. R. 7011.8150	The Permittee must keep the following records: (1) A copy of each notification and report submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR Section 63.10(b)(2)(xiv). (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (3) (does not apply) (4) Records of all required maintenance performed on the air pollution control and monitoring equipment. (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR Section 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
14.0		CD	40 CFR Section 63.6655(e); Minn. R. 7011.8150	The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to the maintenance plan.
15.0		CD	40 CFR Section 63.6660; Minn. R. 7011.8150	a. Records must be in a form suitable and readily available for expeditious review according to 40 CFR Section 63.10(b)(1). b. As specified in 40 CFR Section 63.10(b)(1), keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. c. Keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR Section 63.10(b)(1).
16.0		CD	40 CFR Section 63.6665; Minn. R. 7011.8150	The following parts of the general provisions apply: 40 CFR Sections 63.1-63.5; 63.6(a); 63.3(b)(1)-(5); 63.6(b)(7); 63.6(c)(1)-(2); 63.6(c)(5); 63.6(f)(2)-(3); 63.6(g)(1)-(3); 63.6(i)-(j); 63.8(a)(1)-(2); 63.8(b)(1)-(3); 63.8(c)(1)(i)-(iii); 63.8(f)(1)-(6); 63.8(g); 63.9(a); 63.9(b)(1)-(5); 63.9(c)-(d); 63.9(h)(1)-(6); 63.9(i)-(j); 63.10(a); 63.10(b)(1); 63.10(b)(2)(vi)-(xiv); 63.10(b)(3); 63.10(c); 63.10(d)(1)-(2); 63.10(d)(4); 63.10(e)(1); 63.10(e)(2)(i); 63.10(e)(3); 63.10(f); and 63.12-63.15.

COMPLIANCE PLAN CD-01

Facility Name: Cold Spring Granite Co

Permit Number: 14500067 - 007

Subject Item: **EU 129 Foundry Emergency Generator**

Associated Items: GP 018 PM Limits

GP 019 VOC Limit

GP 020 NOX Limit

GP 027 Engines

SV 049 Foundry Gas-fired Generator

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	SUBPART ZZZZ REQUIREMENTS (See also GP027)
2.0		CD	40 CFR Section 63.6595(a)(1); Minn. R. 7011.8150	Comply with the applicable emission limitations and operating requirements of Subpart ZZZZ no later than May 3, 2013.
3.0		CD	40 CFR Section 63.6603(a); Minn. R. 7011.8150	The Permittee must change the oil and filter every 1,440 hours of operation or annually, whichever comes first.
4.0		CD	40 CFR Section 63.6603(a); Minn. R. 7011.8150	The Permittee must inspect the spark plugs every 1,440 hours of operation or annually, whichever comes first.
5.0		CD	40 CFR Section 63.6603(a); Minn. R. 7011.8150	The Permittee must inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.
6.0		CD	40 CFR Section 63.6605(a); Minn. R. 7011.8150	The Permittee must be in compliance with the applicable emission limitations and applicable operating limitations of 40 CFR Part 63, Subpart ZZZZ, at all times.
7.0		CD	40 CFR Section 63.6605(b); Minn. R. 7011.8150	The Permittee must at all times operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not required the Permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieived. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
8.0		CD	40 CFR Section 63.6625(e); 40 CFR Section 63.6655(d); Minn. R. 7011.8150	The Permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions.
9.0		CD	40 CFR Section 63.6625(h); Minn. R. 7011.8150	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
10.0		CD	40 CFR Section 63.6625(i); Minn. R. 7011.8150	The Permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in 40 CFR Section 63.6595(a). The oil analysis must be performed at the same frequency specified for changing the oil in 40 CFR Section 63.6595(a). The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. continued below:
11.0		CD	40 CFR Section 63.6625(i); Minn. R. 7011.8150	continued from above: If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

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12.0		CD	40 CFR Section 63.6640(a); Minn. R. 7011.8150	The Permittee must: - Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or - Develop and follow a permittee-developed maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
13.0		CD	40 CFR Section 63.6655(a); Minn. R. 7011.8150	The Permittee must keep the following records: (1) A copy of each notification and report submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR Section 63.10(b)(2)(xiv). (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (3) (does not apply) (4) Records of all required maintenance performed on the air pollution control and monitoring equipment. (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR Section 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
14.0		CD	40 CFR Section 63.6655(e); Minn. R. 7011.8150	The Permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to the maintenance plan.
15.0		CD	40 CFR Section 63.6660; Minn. R. 7011.8150	a. Records must be in a form suitable and readily available for expeditious review according to 40 CFR Section 63.10(b)(1). b. As specified in 40 CFR Section 63.10(b)(1), keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. c. Keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR Section 63.10(b)(1).
16.0		CD	40 CFR Section 63.6665; Minn. R. 7011.8150	The following parts of the general provisions apply: 40 CFR Sections 63.1-63.5; 63.6(a); 63.3(b)(1)-(5); 63.6(b)(7); 63.6(c)(1)-(2); 63.6(c)(5); 63.6(f)(2)-(3); 63.6(g)(1)-(3); 63.6(i)-(j); 63.8(a)(1)-(2); 63.8(b)(1)-(3); 63.8(c)(1)(i)-(iii); 63.8(f)(1)-(6); 63.8(g); 63.9(a); 63.9(b)(1)-(5); 63.9(c)-(d); 63.9(h)(1)-(6); 63.9(i)-(j); 63.10(a); 63.10(b)(1); 63.10(b)(2)(vi)-(xiv); 63.10(b)(3); 63.10(c); 63.10(d)(1)-(2); 63.10(d)(4); 63.10(e)(1); 63.10(e)(2)(i); 63.10(e)(3); 63.10(f); and 63.12-63.15.

Attachment 3

Additional Points Calculation

Points-Based Fee Calculator

1) AQ Facility ID No.:	14500067
2) Facility Name:	Cold Spring Granite Co
3) Small business? y/n?	no
4) DQ Numbers (including all rolled) :	3808
5) Date of each Application Received:	1/20/12
6) Final Permit No.	14500067-007
7) Permit Staff	Toni Volkmeier
8) "Work completed" in which .xls file (i.e. unit 2b, unit 1a, biofuels)?	NA

Total Points 20

Application Type	**DQ No.**	**Qty.**	*Points*	**Total Points**	**Details**
Administrative Amendment			*1*	0	
Minor Amendment			*4*	0	
Applicability Request			*10*	0	
Moderate Amendment			*15*	0	
Major Amendment			*25*	0	
Individual State Permit - First Time	3808	0	*50*	0	paid with application
Individual Part 70 Permit - First Time			*75*	0	
Additional Points					
Modeling Review			*15*	0	
BACT Review			*15*	0	
LAER Review			*15*	0	
CAIR/Part 75 CEM analysis			*10*	0	
NSPS Review			*10*	0	
NESHAP Review			*10*	0	
Case-by-case MACT Review			*20*	0	
Netting			*10*	0	
Limits to remain below threshold	3808	2	*10*	20	avoiding Part 70 & NSR
Plantwide Applicability Limit (PAL)			*20*	0	
AERA review			*15*	0	
Variance request under 7000.7000			*35*	0	
Confidentiality request under 7000.1300			*2*	0	
EAW review					
Part 4410.4300, subparts 18, item A; and 29			*15*	0	
Part 4410.4300, subparts 8, items A & B; 10, items A to C; 16, items A & D; 17, items A to C & E to G; and 18, items B & C			*35*	0	
Part 4410.4300, subparts 4; 5 items A & B; 13; 15; 16, items B & C; and 17 item D			*70*	0	

NOTES:

Additional Fee Paid – check #679045 - $5700.00 – 6/4/12.

Points-Based Fee Calculator