

Bay Area Air Quality Management District

375 Beale Street, Suite 600
San Francisco, CA 94105
(415) 771-6000

Permit Evaluation and Statement of Basis for RENEWAL of

MAJOR FACILITY REVIEW PERMIT

For

AB&I Foundry Facility #A0062

Facility Address:

7825 San Leandro Street
Oakland, CA 94621

Mailing Address:

7825 San Leandro Street
Oakland, CA 94621

Application Engineer: Carol Lee
Site Engineer: Carol Lee

Applications: 28312 and 27552

January 2018

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Title V Statement of Basis

A. Background

This facility is subject to the Operating Permit requirements of Title V of the federal Clean Air Act, Part 70 of Title 40 of the Code of Federal Regulations (CFR), and BAAQMD Regulation 2, Rule 6, Major Facility Review because it is a major facility as defined by BAAQMD Regulation 2-6-212. It is a major facility because it has the “potential to emit” (as defined by BAAQMD Regulation 2-6-218) more than 100 tons per year of carbon monoxide.

Major Facility Review permits (Title V permits) must meet specifications contained in 40 CFR Part 70 as delineated in BAAQMD Regulation 2, Rule 6. The permits must contain all “applicable requirements” (as defined in BAAQMD Regulation 2-6-202), including emission limits and standards, monitoring requirements, recordkeeping requirements, and reporting requirements. The permit holders must submit reports of all required monitoring at least every six months and compliance certifications at least every year.

Pursuant to Regulation 2-6-416, the District has reviewed the terms and conditions of AB&I’s Major Facility Review permit for the renewal of the permit in the same way as an application for an initial Major Facility Review permit. This review includes an analysis of applicability determinations for all sources, including those that have been modified or permitted since the issuance of the initial Major Facility Review permit. The review also includes an assessment of all monitoring in the permit for sufficiency to determine compliance.

In the Bay Area, State and District requirements are also “applicable requirements” and are included in the permit. These requirements can be federally enforceable or non-federally enforceable. All applicable requirements are contained in Sections I through VI of the permit.

Each facility in the Bay Area is assigned a facility identifier that consists of a letter and a 4-digit number. This identifier is also considered to be the identifier for the permit. The identifier for this facility is A0062.

The facility changed its name from American Brass & Iron Foundry to AB&I Foundry and it no longer processes brass.

This facility received its initial Title V permit on March 5, 2002. The permit was renewed on April 13, 2012. This application is for a permit renewal. Although the current permit expires on April 12, 2017, it continues in force until the District takes final action on the permit renewal. The standard sections of the permit have been updated to include new standard language used in all Title V permits. The proposed permit shows all changes to the permit in ~~strikeout~~/underline format.

The District proposes to renew the permit. The permit will include modifications requested by the permittee, as well as other modifications by the District, and it will incorporate earlier permit revisions and modifications since the last renewal and minor revision. The standard sections of the permit have been updated to include new standard language used in all Title V permits and new requirements applicable to all Title V facilities. Also, various other corrections have been made to the permit.

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All of these revisions are described below in the permit content section. The proposed permit shows all changes to the permit in strikeout/underline format.

The facility has completed the following applications since the last minor revision of the Major Facility Review permit was issued on August 1, 2014:

Table 1: Permit Applications included in this Title V permit

Application Number(s) (Title V/New Source Review (NSR))	Description
NSR # 27323	Baghouse #4 (A-63 is a replacement of A-18)
Title V # 27552	Minor Revision NSR # 27323
NSR # 27952	S-51 Dipping, Multi-Coating
NSR # 28000	S-32 Flow Jet Pipe Labeler
NSR # 28038	Exempt Cold Cleaner
Title V # 28312	Title V Renewal
NSR # 28616	Administrative Change of Conditions for S-34, S-35, and S-36 Pipe Finishing Dip Tank Operation

Application 28312 seeks renewal of the Title V permit, which is the subject of this action. Application 27552 seeks to incorporate the changes processed by Application 27323 in the District permit into the facility’s Title V permit. Evaluation of Applications 28312 and 27552 has been incorporated into this renewal and will be completed upon completion of this action.

This Statement of Basis will cover the evaluation of Applications 28312 and 27552. See Appendix A for copies of the evaluation reports for Applications 27323, 27952, 28000, 28038, and 28616 which amended the Title V permit.

B. Facility Description

AB&I Foundry is a grey iron foundry for the production of cast iron in the manufacturing of pipe and fittings. Iron scrap is melted in a cupola furnace by burning coke, limestone is added as a flux to remove impurities, and silicon carbide is added as needed to alter the composition. The molten metal is transferred to an electric induction holding furnace before being poured into molds. For fittings and custom castings, the molten metal is poured into greensand molds, allowed to cool and harden, and then removed from the sand molds during shakeout. The castings are then conveyed to grinding and finishing where burrs and other excess metal are removed. The pipe fittings are then coated to prevent corrosion.

For pipes, the molten metal is poured into a permanent mold centrifugal casting machine as the machine rotates about its axis. The molten metal is thrown towards the inside mold wall, where it solidifies after cooling. As with the castings, excess metal is removed during grinding. The pipes are then dipped into asphalt to prevent corrosion and labeled.

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AB&I's reported emissions from their renewal Title V permit application submitted in October 2016 are summarized below.

2015 Emissions in Tons per Year

Total Iron Melted	62000
PM	24.16
PM10	13.79
VOC	19.45
NOx	11.05
SO2	26.37
CO	111.92
GHGs (CO2e)	17661.28
Toluene	8.52E-01
Xylene (Mixed Isomers)	2.82E-01
Naphthalene	3.20E-02
1-Methylnaphthalene	2.55E-03
2-Methylnaphthalene	3.98E-03
Ethylbenzene	5.67E-02
Acetaldehyde	6.72E-02
Phenol	5.52E-01
Benzene	1.87E+00
Formaldehyde	8.08E-01
Hexane	5.00E-02
o-Cresols	3.09E-01
m,p-Cresols	7.16E-02
Propionaldehyde	6.72E-04
3-Methylchloranthrene	2.40E-08
7,12-Dimethylbenz(a)anthracene	1.88E-07
Acenaphthene	2.50E-08
Acenaphthylene	2.40E-08
Anthracene	3.19E-08
Benz(a)anthracene	2.40E-08
Benzo(a)pyrene	1.60E-08
Benzo(b)fluoranthene	2.40E-08
Benzo(g,h,i,)perylene	1.60E-08
Benzo(k)fluoranthene	2.40E-08
Chrysene	2.40E-08
Dibenzo(a,h)anthracene	1.60E-08
Dichlorobenzene	1.60E-08
Fluoranthene	3.99E-08
Fluorene	3.73E-08
Indeno(1,2,3-cd)pyrene	2.40E-08
Phenanathrene	2.26E-07
Pyrene	6.65E-08

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Arsenic (As)	1.45E-04
Beryllium (Be)	1.60E-07
Cadmium (Cd)	1.43E-03
Chromium (Cr)	8.68E-03
Cobalt (Co)	1.12E-06
Lead (Pb)	3.90E-02
Manganese (Mn)	2.44E-01
Mercury (Hg)	3.46E-06
Nickel (Ni)	2.79E-05
Selenium (Se)	1.55E-04

Changes to permit:

The responsible official was changed to Michael Lowe.

C. Permit Content

The legal and factual basis for the permit follows. The permit sections are described in the order presented in the permit.

I. Standard Conditions

This section contains administrative requirements and conditions that apply to all facilities. Many of these conditions derive from 40 CFR § 70.6, Permit Content, which dictates certain standard conditions that must be placed in the permit. The language that the District has developed for many of these requirements has been adopted into the BAAQMD Manual of Procedures, Volume II, Part 3, Section 4, and therefore must appear in the permit.

The standard conditions also contain references to BAAQMD Regulation 1 and Regulation 2. These are the District's General Provisions and Permitting rules.

Changes to permit:

- The dates of adoption and approval of rules in Standard Condition 1.A have been updated.
- The address in Standard Condition 1.F for the Bay Area Air Quality Management District has been updated to 375 Beale Street, Suite 600, in San Francisco, CA 94105.
- The division name and region number format of the USEPA in Standard Condition 1.G was updated.

II. Equipment

This section of the permit lists all permitted or significant sources. Each source is identified by an S and a number (e.g., S-24).

Permitted sources are those sources that require a BAAQMD operating permit pursuant to BAAQMD Rule 2-1-302.

Significant sources are those sources that have a potential to emit of more than 2 tons per year of a "regulated air pollutant" (as defined in BAAQMD Rule 2-6-222) or 400 pounds per year of a "hazardous air pollutant" (as defined in BAAQMD Rule 2-6-210).

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All abatement (control) devices that control permitted or significant sources are listed. Each abatement device whose primary function is to reduce emissions is identified by an A and a number (e.g., A-24). If a source is also an abatement device, such as when an engine controls VOC emissions, it will be listed in the abatement device table but will have an “S” number. An abatement device may also be a source (such as a thermal oxidizer that burns fuel) of secondary emissions. If the primary function of a device is to control emissions, it is considered an abatement (or “A”) device. If the primary function of a device is a non-control function, the device is considered to be a source (or “S”).

The equipment section is considered to be part of the facility description. It contains information that is necessary for applicability determinations, such as fuel types, contents or sizes of tanks, etc. This information is part of the factual basis of the permit.

Each of the permitted sources has previously been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. These permits are issued in accordance with state law and the District’s regulations. The capacities in the permitted sources table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-403.

Following are explanations of the differences in the equipment list between the time that the facility originally applied for a Title V permit and the permit proposal date:

Changes to Permit:

Devices Removed from Service or Archived since Application was submitted:

- S-43 Pipe Finishing Dip Tank (P1)
- S-23 9400 Gallon Storage Tank (Process Water)
- A-18 Baghouse #4

Devices Permitted Since the Renewal Application was submitted:

- A-63 Baghouse #4, NSR Application # 27323
- S-63 Cold Cleaner, Bio-Circle, Model 55D610, 37 Gallon (Exempt), NSR Application # 28038

Devices with Changed Permit Status: None.

Corrections to Devices Shown in Application

None.

III. Generally Applicable Requirements

This section of the permit lists requirements that generally apply to all sources at a facility including insignificant sources and portable equipment that may not require a District permit. If a generally applicable requirement applies specifically to a source that is permitted or significant, the standard will also appear in Section IV and the monitoring for that requirement will also appear in Section IV of the permit. Parts of this section apply to all facilities (e.g., particulate, architectural coating, odorous substance, and sandblasting standards). In addition, standards that apply to insignificant or unpermitted sources at a facility (e.g., refrigeration units that use more than 50 pounds of an ozone-depleting compound) are placed in this section.

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Unpermitted sources are exempt from normal District permits pursuant to an exemption in BAAQMD Regulation 2, Rule 1. They may, however, be specifically described in a Title V permit if they are considered “significant sources” as defined in BAAQMD Rule 2-6-239.

Changes to permit:

The dates of adoption or approval of the rules and their “federal enforceability” status in Table III have been updated.

IV. Source-Specific Applicable Requirements, Applicable Limits & Compliance Monitoring Requirements

This section of the permit lists the applicable requirements, applicable limits, and compliance monitoring requirements that apply to permitted or significant sources. These applicable requirements are contained in tables that pertain to one or more sources that have the same requirements. The order of the requirements is:

- District Rules
- SIP Rules (if any) are listed following the corresponding District rules. SIP rules are District rules that have been approved by EPA for inclusion in the California State Implementation Plan. SIP rules are “federally enforceable” and a “Y” (yes) indication will appear in the “Federally Enforceable” column. If the SIP rule is the current District rule, separate citation of the SIP rule is not necessary and the “Federally Enforceable” column will have a “Y” for “yes”. If the SIP rule is not the current District rule, the SIP rule or the necessary portion of the SIP rule is cited separately after the District rule. The SIP portion will be federally enforceable; the non-SIP version will not be federally enforceable, unless EPA has approved it through another program.
- Other District requirements, such as the Manual of Procedures, as appropriate.
- Federal requirements (other than SIP provisions)
- BAAQMD permit conditions. The text of BAAQMD permit conditions is found in Section VI of the permit.
- Federal permit conditions. The text of Federal permit conditions, if any, is found in Section VI of the permit.

Section IV of the permit contains citations to all of the applicable requirements and now also contains the monitoring requirements were in Section VII of the initial Title V permit. The text of the requirements is found in the regulations, which are readily available on the District or EPA websites, or in the permit conditions, which are found in Section VI of the permit.

Complex Applicability Determinations

Applicability of 40 CFR, Part 64, Compliance Assurance Monitoring (CAM)

The Compliance Assurance Monitoring (CAM) regulation in 40 CFR, Part 64 was developed to provide assurance that facilities comply with applicable emissions limitations by adequately monitoring control devices. The CAM rule became effective on November 21, 1997. However, most facilities are not affected by CAM requirements until they submit applications for Title V permit renewal. As required, AB&I has conducted an applicability analysis for CAM as part of this renewal application. The applicable requirements have been incorporated in the permit Table III-Generally Applicable Requirements.

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CAM applies to a source of criteria pollutant or hazardous air pollutant (HAP) emissions if all the following requirements are met:

- The source is located at a major source for which a Title V permit is required; and
- The source is subject to a federally enforceable emission limitation or standard for a criteria pollutant or HAP; and
- The source uses a control device to comply with the federally enforceable emission limitation or standard; and
- The source has potential pre-control emissions of the regulated pollutant that are equal to or greater than the major source threshold for the pollutant (in BAAQMD, the major source thresholds are 100 tons per year for each criteria pollutant, 10 tons per year for a single HAP, and 25 tons per year for two or more HAPs); and
- The source is not otherwise exempt from CAM.

The applicability of 40 CFR, Part 64, Compliance Assurance Monitoring, was reviewed for the sources at this facility during the prior renewal of the Title V permit. BAAQMD Condition #25039 for Compliance Assurance Monitoring was created upon renewal of the permit to impose the monitoring requirements on all affected sources in accordance with CAM requirements in 40 CFR Part 64.6 through 64.9. The monitoring requirements are summarized below.

Table 2: Compliance Assurance Monitoring (CAM) Summary

Source No.	Abatement Device	Emission Limitation Citation	CAM Condition #25039	Visible Emissions or Bag Leak Detector - Frequency	Pressure Drop Monitoring - Frequency	Dust Collector and Monitoring System Inspection	Source Test Frequency
S-1 Cupola ^a	A-19 Baghouse	SIP 6-301, 310, 311	Parts 14-28	Bag Leak Detector (< 10mg per actual cubic meter) - C	2 - 10 inches water – P/D	P/per O&M plan (NESHAP)	P/every 5 years
S-2 Pouring, Cooling, Shakeout ^b	A-21 Baghouse #5	SIP 6-301, 310, 311	Parts 14-28	Bag Leak Detector (< 10mg per actual cubic meter) - C	2 - 10 inches water – P/D	P/per O&M plan (NESHAP)	P/every 5 years
S- 2 Pouring, Cooling, Shakeout S-49 Casting Grinding (exempt source)	A-14 Baghouse #2	SIP 6-301, 310, 311	Parts 1-13	M22 (no visible emissions) - P/W	2 - 10 inches water – P/D	P/per O&M plan (non-NESHAP)	P/every 5 years
S- 2 Pouring, Cooling, Shakeout	A-63 Baghouse #4	SIP 6-301, 310, 311	Parts 14-28	Bag Leak Detector (< 10mg per actual cubic meter) - C	2 - 10 inches water – P/D	P/per O&M plan (non-NESHAP)	P/every 5 years

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Source No.	Abatement Device	Emission Limitation Citation	CAM Condition #25039	Visible Emissions or Bag Leak Detector - Frequency	Pressure Drop Monitoring - Frequency	Dust Collector and Monitoring System Inspection	Source Test Frequency
S-3 Sand Preparation	A-15 Baghouse #1	SIP 6-301, 310, 311	Parts 1-13	M22 (no visible emissions) - P/W	2 - 10 inches water – P/D	P/per O&M plan (non-NESHAP)	P/every 5 years
S-4 Wheelabrator Shot Blast (No.1)	A-17 Baghouse #3	SIP 6-301, 310, 311	Parts 1-13	M22 (no visible emissions) - P/W	2 - 10 inches water – P/D	P/per O&M plan (non-NESHAP)	P/every 5 years
S-5 Pangborn Shot Blast (No. 2)							
S-27 Wheelabrator Shot Blast (No. 3)							
S-30 Blast Cleaning Product (Inline)							

Notes:

- A-63 replaced A-18.
- M22: EPA Method 22, P/M: Periodic per month, P/Q: Periodic per quarter, P/M: Periodic per month, P/W: Periodic per week, P/C: Periodic/continuous
- Inspection of the baghouses is based on 40 CFR Part 63, Subpart EEEEE and will be contained in the Operations and Maintenance Plans

^aCAM is not applicable to the following emissions from S-1 Cupola:

- PM limit in 40 CFR Part 63, Subpart EEEEE (section 63.7690(a)(2)(i)) because it was proposed by the Administrator after November 15, 1990. (exempt per section 64.2(b)(1)(i))
- VOC limit in 40 CFR Part 63, Subpart EEEEE (section 63.7690(a)(8)) because it was proposed by the Administrator after November 15, 1990. (exempt per section 64.2(b)(1)(i))
- SOx limit in SIP 9-1-304 – no control device, exempt per 64.2(a)(2)
- NOx – no federally enforceable emission limit, exempt per 64.2(a)(1); and no control device, exempt per 64.2(a)(2)
- CO – no federally enforceable emission limit, exempt per 64.2(a)(1)

^bCAM is not applicable to the following emissions from S-2 Pouring, Cooling, Shakeout:

- PM limit in 40 CFR Part 63, Subpart EEEEE (section 63.7690(a)(5)(i)) because it was proposed by the Administrator after November 15, 1990. (exempt per section 64.2(b)(1)(i))
- VOC, SOx, NOx, CO – no control device, exempt per 64.2(a)(2)

The monitoring requirements in the table above meet the requirements in 40 CFR Part 64 as detailed below:

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Section 64.3(a)(1): Indicators of emission control performance are listed in the table above.

Section 64.3(a)(2): Appropriate ranges or designated conditions are listed in the table above.

Section 64.3(b)(1): The data are representative of emissions or parameters because the monitoring parameters are based on monitoring requirements in 40 CFR Part 63, Subpart EEEEE for similar emissions limits.

Section 64.3(b)(2): The verification procedures allow use of manufacturer’s recommendations.

Section 64.3(b)(3): The quality assurance/quality control procedures are to be included in the operations and maintenance plan.

Section 64.3(b)(4): The monitoring frequency in (iii) requires data collection at least every 24-hour period. Pressure drop readings will be taken on a daily basis.

Section 64.4: The submittal requirements are incumbent upon the facility.

Section 64.5: The deadline for submittals is incumbent upon the facility.

Section 64.6: Permit condition #25039 specifies the required monitoring.

- 64.6(c)(1) – Indicators, means or device used to measure the indicator, performance requirements are listed in condition #25039.
- 64.6(c)(2) – The definition of exceedance is listed in condition #25039 Parts 1 and 14.
- 64.6(c)(3) – The obligation to conduct the monitoring and fulfill the other obligations specified in sections 64.7-64.9 is listed throughout condition #25039.

Section 64.7: The operation of monitoring is incumbent upon the facility

Section 64.8: The optional requirements for a Quality Improvement Plan would be required if there were problems with the existing monitoring strategy. Problems are not anticipated at the time of writing.

Sections 64.9, Reporting and recordkeeping requirements, and 64.10, Savings Provisions, do not need any additional permit terms beyond inclusion of the citation in the permit.

As part of the prior Title V permit review, the District added source test requirements to enhance monitoring of abatement devices that are not subject to CAM. These sources are exempt from CAM per 64.2(a)(3) because the PTE are less than major source thresholds. The sources are identified in the table below. Although the sources are not subject to the Continuous Assurance Monitoring (CAM) Regulation (40 CFR Part 64), they are subject to the periodic monitoring requirements under EPA Title V, Part 70.6(1)(3).

Table 3: Additional Monitoring Summary

Source No.	Abatement Device	Emission Limitation Citation	Condition	Monitor	Dust Collector Inspection	Source Test Frequency
S-1	A-19	SIP 11-1-301	9351, Part 11	Bag Leak Detector - C	P/per O&M plan (NESHAP)	P/every 5 years
S-1	A-20, A-22	BAAQMD 8-2-301	9351, Part 11	Temperature Monitor	-	P/every 5 years
S-25	A-25	SIP 6-301, 310, 311	9668, Part 8	Bag Leak Detector - C	P/W	P/every 5 years

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Applicability of 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs)

AB&I Foundry is subject to the following NESHAPs regulations:

- 40 CFR Part 63, Subpart EEEEE National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries
- 40 CFR Part 63, Subpart MMMM National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

Applicability of BAAQMD Regulation 8, Rule 4 Organic Compounds: General Solvent and Surface Coating Operations to S-32 Flow Jet Pipe Labeler

S-32 is subject to Regulation 8, Rule 4 because it is exempt from Regulation 8, Rule 19 Surface Preparation and Coating of Miscellaneous Metal Parts and Products per Regulation 8-19-117 for Stencil Coatings. Regulation 8-4-302 allows three options to comply with the regulation. S-32 meets the option in Regulation 8-4-302.3 because the VOC content (as defined in Regulation 8-4-214) of the coating is less than 3.5 lb/gallon of coating.

Changes to permit:

Table IV-H was amended to reflect the change of POC emissions limit from 0 to 1,050 lbs/yr approved as part of the change of condition application # 28000 for S-32. A copy of the evaluation report for Application # 28000 is in Appendix A of this Statement of Basis.

Table IV-I was amended to delete reference to S-43 which has been shut down and removed from operation. In addition, to allow flexibility to use of other synthetic asphalt coatings manufactured by companies other than Professional Coatings Tech, Permit Condition # 24639 was amended as part of the change of condition application # 28616. A copy of the evaluation report for Application # 28616 is in Appendix A of this Statement of Basis.

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V. Schedule of Compliance

A schedule of compliance is required in all Title V permits pursuant to BAAQMD Regulation 2-6-409.10 which provides that a major facility review permit shall contain the following information and provisions:

“409.10A schedule of compliance containing the following elements:

- 10.1 A statement that the facility shall continue to comply with all applicable requirements with which it is currently in compliance;
- 10.2 A statement that the facility shall meet all applicable requirements on a timely basis as requirements become effective during the permit term; and
- 10.3 If the facility is out of compliance with an applicable requirement at the time of issuance, revision, or reopening, the schedule of compliance shall contain a plan by which the facility will achieve compliance. The plan shall contain deadlines for each item in the plan. The schedule of compliance shall also contain a requirement for submission of progress reports by the facility at least every six months. The progress reports shall contain the dates by which each item in the plan was achieved and an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.”

Since the District has not determined that the facility is out of compliance with an applicable requirement, the schedule of compliance for this permit contains only sections 2-6-409.10.1 and 2-6-409.10.2.

The responsible official for AB&I submitted a signed Certification Statement form dated October 17, 2017. On this form, the responsible official certified that the following statements are true:

- Based on information and belief formed after reasonable inquiry, the source(s) identified in the Applicable Requirements and Compliance Summary form that is(are) in compliance will continue to comply with the applicable requirement(s);
- Based on information and belief formed after reasonable inquiry, the source(s) identified in the Applicable Requirements and Compliance Summary form will comply with future-effective applicable requirement(s), on a timely basis;
- Based on information and belief formed after reasonable inquiry, information on application forms, all accompanying reports, and other required certifications is true, accurate, and complete;
- All fees required by Regulation 3, including Schedule P, have been paid.

Changes to permit:

No changes will be made to this part of the permit.

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VI. Permit Conditions

During the Title V permit development, the District has reviewed the existing permit conditions, deleted the obsolete conditions, and, as appropriate, revised the conditions for clarity and enforceability. Each permit condition is identified with a unique numerical identifier, up to five digits.

When necessary to meet Title V requirements, additional monitoring, recordkeeping, or reporting requirements have been added to the permit.

All changes to existing permit conditions are clearly shown in “strike-out/underline” format in the proposed permit. When the permit is issued, all “strike-out” language will be deleted and all “underline” language will be retained, subject to consideration of comments received.

The existing permit conditions are derived from previously issued District Authorities to Construct (A/C) or Permits to Operate (P/O). Permit conditions may also be imposed or revised as part of the annual review of the facility by the District pursuant to California Health and Safety Code (H&SC) § 42301(e), through a variance pursuant to H&SC § 42350 *et seq.*, an order of abatement pursuant to H&SC § 42450 *et seq.*, or as an administrative revision initiated by District staff. After issuance of the Title V permit, permit conditions will be revised using the procedures in Regulation 2, Rule 6, Major Facility Review.

The District has reviewed and, where appropriate, revised or added new annual and daily throughput limits on sources so as to help ensure compliance with District rules addressing preconstruction review. The applicability of preconstruction review depends on whether there is a “modified source” as defined in District Rule 2-1-234. Whether there is a modified source depends in part on whether there has been an “increase” in “emission level.” 2-1-234 defines what will be considered an emissions level increase, and takes a somewhat different approach depending on whether a source has previously permitted by the District.

Sources that were modified or constructed since the District began issuing new source review permits will have permits that contain throughput limits, and these limits are reflected in the Title V permit. These limits have previously undergone District review, and are considered to be the legally binding “emission level” for purposes of 2-234.1.2. By contrast, for older sources that have never been through preconstruction review (commonly referred to as “grandfathered” sources), an “increase” in “emission level” is addressed in 2-1-234.1.2. A grandfathered source is not subject to preconstruction review unless its emission level increases above the highest of either: 1) the design capacity of the source, 3) the capacity listed in a permit to operate, or 3) highest capacity demonstrated prior to March 2000. However, if the throughput capacity of a grandfathered source is limited by upstream or downstream equipment (i.e., is “bottlenecked”), then the relaxing of that limitation (“debottlenecking”) is considered a modification.

The District has written throughput limits into the Title V permit for grandfathered sources. As discussed above, these limits are written for the purpose of determining whether an increase in emission levels has occurred. The purpose of these limits is to facilitate implementation of preconstruction review program. If these limits are exceeded, the facility would be expected to report the exceedence, and the District would treat the reported exceedence as presumptively establishing the occurrence of a modification. The facility would then be expected to apply for a preconstruction

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permit addressing the modification and the District would consider whether an enforcement action was appropriate.

It is important to note the presumptive nature of throughput limits for grandfathered sources that are created in the Title V permit. These limits are generally based upon the District's review of information provided by the facility regarding the design capacity or highest documented capacity of the grandfathered source. To verify whether these limits reflect the true design, documented, or "bottlenecked" capacity (pursuant to 2-1-234.1.2) of each source is beyond the resource abilities of the District in this Title V process. Moreover, the District cannot be completely confident that the facility has had time or resources necessary to provide the most accurate information available in this regard. Creating throughput limits in the Title V permit for grandfathered sources is not required by either Part 70 or the District's Major Facility Review rules. Despite the lack of such a requirement, and despite the resource and information challenges presented in the Title V process, the District believes that writing presumptive limits for grandfathered sources into the Title V permit will provide a measure of predictability regarding the future applicability of the preconstruction review program, and that this increased predictability is universally beneficial.

It follows from the presumptive nature of these throughput limits for grandfathered sources that exceedance of these limits is not per se a violation of the permit. *Failure to report an exceedance would be a permit violation.* In this sense, the throughput limits function as monitoring levels, and are imposed pursuant to the District's authority to required monitoring that provide a reasonable assurance of compliance. If an exceedance occurs, the facility would have an opportunity to demonstrate that the throughput limit in fact did not reflect the appropriate limit for purposes of 2-1-234.1.2. If the facility can demonstrate this, no enforcement action would follow, and the permit would be revised at the next opportunity. It also follows that compliance with these limits is not a "safe harbor" for the facility. If evidence clearly shows that a grandfathered source has undergone a "modification" as defined in 2-1-234.1.2, the District would consider that a preconstruction review-triggering event, notwithstanding compliance with the throughput limit in the Title V permit. In other words, the protection afforded the facility by complying with the throughput limit in the Title V permit is only as strong as the information on which it was based. There is no Title V "permit shield" associated with throughput limits for grandfathered sources, as they are being proposed. A shield may be provided if the District determines with certainty that a particular limit is appropriate for purposes of 2-1-234.1.2.

Conditions that are obsolete or that have no regulatory basis have been deleted from the permit.

Conditions have also been deleted due to the following:

- Redundancy in recordkeeping requirements.
- Redundancy in other conditions, regulations and rules.
- The condition has been superseded by other regulations and rules.
- The equipment has been taken out of service or is exempt.
- The event has already occurred (i.e. initial or start-up source tests).

The regulatory basis is listed following each condition. The regulatory basis may be a rule or regulation. The District is also using the following terms for regulatory basis:

- BACT: This term is used for a condition imposed by the Air Pollution Control Officer (APCO) to ensure compliance with the Best Available Control Technology in Regulation 2-2-301.

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- **Cumulative Increase:** This term is used for a condition imposed by the APCO that limits a source's operation to the operation described in the permit application pursuant to BAAQMD Regulation 2-1-403.
- **Offsets:** This term is used for a condition imposed by the APCO to ensure compliance with the use of offsets for the permitting of a source or with the banking of emissions from a source pursuant to Regulation 2, Rules 2 and 4.
- **PSD:** This term is used for a condition imposed by the APCO to ensure compliance with a Prevention of Significant Deterioration permit issued pursuant to Regulation 2, Rule 2.

Changes to permit:

Permit condition # 9351 was amended to update the numbering of the Regulation 2-1 basis which is used. Amended regulation 2-1 was adopted in 2012 and some of its sections (including the one referenced in Permit Condition # 9351) were renumbered.

Permit Condition # 25748 was amended to allow the use of an alternative grey colored coating at S-51 which was reviewed and approved in the change of condition application (Application # 27952). A copy of the evaluation report for Application # 27952 is in Appendix A of this Statement of Basis.

Permit Condition # 21322 was amended to accommodate the change in chemical composition of the ink used at S-32 which was reviewed and approved in the change of condition application (Application # 28000). A copy of the evaluation report for Application # 28000 is in Appendix A of this Statement of Basis.

Permit Condition # 23650 and 25039 were amended to remove A-18 which was shut down and removed from service and add S-63 Baghouse which replaced A-18.

Permit Condition # 24639 was amended to allow the use of an alternative synthetic asphalt pipe coating at S-34, S-35, and S-36 Pipe Finishing Dip Tank Operation which meets the VOC content of 0.04 lb/gal in Part 3 of the permit condition instead of being limited to only that coating manufactured by "Professional Coating Tech, Inc." A copy of the evaluation report for Application # 28616 is in Appendix A of this Statement of Basis. In addition, the basis term "Toxics" was replaced with Regulation 2, Rule 5.

VII. Applicable Limits and Compliance Monitoring Requirements

The combined Section IV and VII of the permit is a summary of numerical limits and related monitoring requirements for each source. The summary includes a citation for each monitoring requirement, frequency of monitoring, and type of monitoring.

The District has reviewed all monitoring and has determined the existing monitoring is adequate with the following exceptions.

The tables below contain only the limits for which there is no monitoring in the applicable requirements. The District has examined the monitoring for other limits and has added monitoring requirements for sources with inadequate monitoring. The District has determined that the remainder of the sources have monitoring that is adequate to provide a reasonable assurance of compliance. Calculations for potential to emit will be provided in the discussion when no monitoring is proposed due to the size of a source.

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Monitoring decisions are typically the result of a balancing of several different factors including: 1) the likelihood of a violation given the characteristics of normal operation, 2) degree of variability in the operation and in the control device, if there is one, 3) the potential severity of impact of an undetected violation, 4) the technical feasibility and probative value of indicator monitoring, 5) the economic feasibility of indicator monitoring, and 6) whether there is some other factor, such as a different regulatory restriction applicable to the same operation, that also provides some assurance of compliance with the limit in question.

These factors are the same as those historically applied by the District in developing monitoring for applicable requirements. It follows that, although Title V calls for a re-examination of all monitoring, there is a presumption that these factors have been appropriately balanced and incorporated in the District's prior rule development and/or permit issuance. It is possible that, where a rule or permit requirement has historically had no monitoring associated with it, no monitoring may still be appropriate in the Title V permit if, for instance, there is little likelihood of a violation. Compliance behavior and associated costs of compliance are determined in part by the frequency and nature of associated monitoring requirements. As a result, the District will generally revise the nature or frequency of monitoring requirements only when it can support a conclusion that existing monitoring is inadequate.

SO₂ Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S-1 Cupola (coke-fired) S-31 Emergency Standby Diesel Generator	BAAQMD 9-1-301	Ground level concentrations of SO ₂ shall not exceed: 0.5 ppm for 3 consecutive minutes AND 0.25 ppm averaged over 60 consecutive minutes AND 0.05 ppm averaged over 24 hours	N
S-31 Emergency Standby Diesel Generator	BAAQMD 9-1-304	Sulfur content of liquid fuel ≤ 0.5% by weight	N

SO₂ Discussion:

BAAQMD Regulation 9-1-301 and 9-1-304

Area monitoring to demonstrate compliance with the ground level SO₂ concentration requirements of Regulation 9-1-301 is at the discretion of the APCO (per BAAQMD Regulation 9-1-501). Ground level monitoring is not required by the APCO for this facility since SO₂ is monitored through the sulfur content in the fuel, and periodic source testing for the cupola. The SO₂ from the engine is limited by the fuel sulfur limit in diesel, which is regulated by the state to contain no more than 15 ppm (0.0015%) sulfur.

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PM Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S-31 Emergency Standby Diesel Generator	SIP 6-303	OPACITY Ringelmann 2.0	N
	SIP 6-310	FILTERABLE PARTICULATE 0.15 gr/dscf	N

PM Discussion:

SIP Regulation 6, Rule 1“Particulate Matter and Visible Emissions”

Visible Emissions

SIP Regulation 6-303 limit visible emissions to no darker than 2.0 on the Ringelmann Chart (except for periods or aggregate periods less than 3 minutes in any hour). S-31 Emergency Standby Diesel Generator uses only CARB diesel (ultra low sulfur) and is not expected to emit visible emissions.

SIP Regulation 6-310 limits grain loading to 0.15 grains per dry standard cubic foot. As discussed below, periodic monitoring is not justified for the engines. Diesel engine S-31 is for emergency backup purposes.

No periodic monitoring is justified for the engine for three reasons: (1) potential to emit is low, (2) grain loading is unlikely to exceed the SIP Regulation 6-310 limit, and (3) CAPCOA/CARB/EPA Region IX guidance does not recommend periodic monitoring for this type of source. Each of these reasons is discussed in greater detail below.

First, the potential to emit (PTE) for particulate for the engine is low. The following table shows the emissions using the factor of 0.34 g PM10/hp-hr from NSR Application #4778. The engine is assumed to operate for 500 hours, using the guidance in John Seitz' memo of September 6, 1995 entitled Calculating Potential to Emit (PTE) for Emergency Generators, which states that "...500 hours is an appropriate default assumption for estimating the number of hours that an emergency generator could be expected to operate under worst-case conditions."

Diesel Engine Potential to Emit – Particulate Matter			
Source #	HP	lb/yr @ 500 hr/yr	tons/yr @ 500 hr/yr
31	1786	669	0.334

The emissions would likely be lower than the above estimates because engines in California generally use low-sulfur fuel containing less than 0.0015% S, which lowers emissions, but by an unknown amount. In addition, the engine is subject to BAAQMD Condition #19947 that

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limits the non-emergency hours of operation to no more than 10.6 hours. (EPA makes the point on page 39 of the order that the limit on hours of operation is not federally enforceable. It should be noted that in the 1995 National Mining Association v. EPA case, the court decided that limits did not have to be federally enforceable to limit potential to emit. EPA's treatment of a state-only limit as ineffective is contrary to case law.)

Second, grain loading is not likely to exceed the limit in BAAQMD SIP Regulation 6-310.

BAAQMD SIP Regulation 6-310 limits PM emissions to 0.15 gr/dscf. The BAAQMD SIP Regulation 6-310 limit can be compared to the AP-42 PM emission factor as follows:

From 40 CFR 60, Appendix A, Method 19, Table 19-1, a stoichiometric dry gas combustion factor of 9,190 dscf/MMBTU is given for distillate oil combustion. In the absence of actual emissions data for these engines, the District considers the AP-42 PM10 emission factor for diesel IC engines to be representative. From AP-42 Table 3.4-1, "Emission Factors For Large Diesel and All Stationary Dual-Fuel Engines", the PM10 emission factor (based on fuel consumption) is 0.1 lb/MMBTU.

$$(0.1 \text{ lb/MMBTU}) \times (\text{MMBTU}/9190 \text{ dscf}) \times (7000 \text{ grains/lb}) = 0.076 \text{ gr/dscf} < 0.15 \text{ gr/dscf}$$

Since this assumed emission factor is well below the converted BAAQMD SIP Regulation 6-310 emission rate, compliance is assumed.

Third, the "CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources" dated July 2001 recommends that the only monitoring necessary for grain-loading for non-utility distillate-oil-fueled emergency piston-type IC engines is recordkeeping for fuel usage, which is already required for these engines.

Lead Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S-1 Cupola	BAAQMD 11-1-301	Any emission < 6.75 kg (15 lb)/day	N
S-1 Cupola	BAAQMD 11-1-302	Ground Level Concentration Limit Without Background LEAD ≤ 1.0 ug/m ³	N

Following are detailed citations of the lead standards:

- 11-1-301 Daily Limitation:** A person shall not discharge any emission of lead, or compound of lead calculated as lead, from any emission point in excess of 6.75 kg (15 lbs) per day.
- 11-1-302 Ground Level Concentration Limit Without Background:** A person shall not discharge any emission of lead, or compound of lead calculated as lead, that will result in ground level concentrations in excess of 1.0 ug/m³ averaged over 24 hours.

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Lead Discussion:

Compliance with 11-1-301

The District added a source test requirement for lead every 5 years in Condition #9351, Part 11. Review of the last source test (performed on January 26, 2017) showed that the average lead emissions was 6.97E-03 lb/day. Because the lead emissions was source tested to be at least 2000 times lower than the limit, no additional monitoring is required.

Compliance with 11-1-302

The District added a source test requirement for lead every 5 years in Condition #9351, Part 11. Monitoring of particulate matter control provides surrogate monitoring for lead and other metals, consistent with 40 CFR Part 63, Subpart EEEEE, National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries requirement to meet PM or metal HAPs limits. The Cupola is also monitored by a bag leak detector, pressure drop monitoring, and periodic inspections. With these measures, the District believes additional monitoring for ground level concentration of lead is not necessary to ensure compliance with the standard.

VOC Discussion:

This District presumes monitoring of VOC by recordkeeping for coating sources and periodic source testing and afterburner temperature monitoring for the cupola is adequate monitoring to assure compliance with the applicable limits.

VIII. Test Methods

This section of the permit lists test methods that are associated with standards in District or other rules. It is included only for reference. In most cases, the test methods in the rules are source test methods that can be used to determine compliance but are not required on an ongoing basis. They are not “applicable requirements” as defined by Regulation 2-6-202.

If a rule or permit condition requires ongoing testing, the requirement will also appear in Section IV of the permit.

Changes to permit:

None

IX. Permit Shield

The District rules allow two types of permit shields. The permit shield types are defined as follows: (1) A provision in a major facility review permit explaining that specific federally enforceable regulations and standards do not apply to a source or group of sources, or (2) A provision in a major facility review permit explaining that specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting are subsumed because other applicable requirements for monitoring, recordkeeping, and reporting in the permit will assure compliance with all emission limits.

The second type of permit shield is allowed by EPA’s “White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program.” The District uses the second type of permit shield for all streamlining of monitoring, recordkeeping, and reporting requirements in Title V permits. The District’s program does not allow other types of streamlining in Title V permits.

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This facility has no permit shields. This permit has no streamlining.

X. Glossary

Changes to permit:

Additional terms were added to the glossary for additional information and clarity.

XI. Revision History

Changes to permit:

This section was updated to reflect the changes to the permit.

D. Alternate Operating Scenarios

No alternate operating scenario has been requested for this facility.

E. Compliance Status

The responsible official for AB&I submitted a signed Certification Statement form dated October 17, 2017. On this form, the responsible official certified that the following four statements are true:

Based on information and belief formed after reasonable inquiry, the sources identified in the Applicable Requirements and Compliance Summary form that are in compliance will continue to comply with the applicable requirements;

Based on information and belief formed after reasonable inquiry, the sources identified in the Applicable Requirements and Compliance Summary form will comply with future-effective applicable requirements, on a timely basis;

Based on information and belief formed after reasonable inquiry, information on application forms, all accompanying reports, and other required certifications is true, accurate, and complete;

All fees required by Regulation 3, including Schedule P have been paid.

F. Differences between the Application and the Proposed Permit

None.

Permit Evaluation and Statement of Basis: Site No. A0062

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APPENDIX A: ENGINEERING EVALUATIONS

Application Number(s) (New Source Review (NSR))	Description
NSR # 27323	Baghouse #4 (A-63 is a replacement of A-18)
NSR # 27952	S-51 Dipping, Multi-Coating
NSR # 28000	S-32 Flow Jet Pipe Labeler
NSR # 28038	Exempt Cold Cleaner
NSR # 28616	Administrative Change of Conditions for S-34, S-35, and S-36 Pipe Finishing Dip Tank Operation

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**ENGINEERING EVALUATION
AB&I FOUNDRY
PLANT NO. 62
APPLICATION NO. 27323**

BACKGROUND

AB&I Foundry is applying for an Authority to Construct and/or Permit to Operate the following equipment:

A-63 Baghouse #4: Make BHM, Model 663-10-6RA 65,000 CFM Rating; Abating S-2, Pouring, Cooling and Shakeout.

A-63 is a replacement of an existing baghouse, A-18.

The foundry has two main processes: pipe and fitting making. S-2 is part of the fitting making process. In the fitting make process, molten iron is poured into the molds made in either DISA 270 or 2013 mold machines, and the amount of iron cast is limited to 36,000 tons per year as specified in Permit Condition Number 23650. Then the newly poured casting is separated from the sand mold in two rotary drums, which are abated by A-18. A-18 has a grain loading limit of 0.14 grain/DSCF per the District Regulation 6-1-310, and is subject to the pressure gauge monitoring requirements in Permit Condition Number 25039. The new baghouse, A-63, has a manufacturer- guaranteed outlet particulate concentration no greater than 0.01 grains/DSCF, and it is equipped with a bag leak detector. The facility also agrees to comply with the bag leak detector monitoring requirements in Permit Condition Number 25039. Since the throughput will not be changed and the grain loading limit will be more stringent, the baghouse replacement project will result in no emission increase. Therefore, the project is considered as an alteration of S-2, and it is not a modified source.

EMISSIONS SUMMARY

The throughput will not be changed, and the new baghouse is guaranteed by the manufacturer to have equal or higher particulate emission reduction efficiency than the existing baghouse. Therefore, the baghouse replacement project will result in no emission increase. The project is considered as an alteration of S-2, and it is not a modified source per Regulation 2-1-234.3.

PLANT CUMULATIVE INCREASE

There will be no increase in PM10 emissions in this application.

TOXICS RISK SCREENING ANALYSIS

Toxic emissions will not increase as a result of this application. Therefore, a health risk screening analysis is not required.

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STATEMENT OF COMPLIANCE

The owner/operator shall comply with Regulation 6, Rule 1: Particulate Matter. The owner/operator is not expected to emit any visible emission from the source in this application that exceeds Ringelmann 1.0 or results in fallout on adjacent property in such quantities as to cause public nuisance per Regulation 6-1-301 and Regulation 1-301. The owner/operator is subject to the particulate weight limitation of 0.15 grains/dscf of Regulation 6-1-310.

This project is considered to be categorically exempt under the District's CEQA Regulation 2-1-312-2 for installation of pollution control or abatement equipment, and therefore is not subject to CEQA review. Also the Air District has determined that this action is exempt from CEQA because the permitting of the project involves no expansion of use beyond that existing at the time of the Air District's CEQA determination (CEQA § 21084; Guidelines § 15301). The Air District's action is also exempt under the "common sense" exemption. (Guidelines § 15601(b)(3)).

The project is over 1000 feet from the nearest school and therefore not subject to the public notification requirements of Reg. 2-1-412.

Best Available Control Technology: In accordance with Regulation 2, Rule 2, Section 301, BACT is triggered for any new or modified source with the potential to emit 10 pounds or more per highest day of POC, NPOC, NO_x, CO, SO₂ or PM₁₀. Because S-2 is not considered as new or modified source in this application, it is not subject to BACT.

Offsets: Offsets must be provided for any new or modified source at a facility that emits more than 10 ton/yr of POC or NO_x. Because S-2 is not considered as new or modified source in this application, offsets are not required.

PSD, NSPS, and NESHAPS do not apply.

PERMIT CONDITIONS

S-2 is subject to Permit Condition Numbers 23650 and 25039 which will be modified as shown in the underline/strikeout format below:

Permit Condition 23650

For S-2 Pouring, Cooling, Shakeout abated by A-14 Baghouse#2, A-~~63+8~~ Baghouse#4, and A-21 Baghouse#5

1. The owner/operator shall abate S-2 Pouring, Cooling, Shakeout with A-14 Baghouse#2, A-21 Baghouse#5, and A-~~63+8~~ Baghouse#4 during all periods of operation. (basis: cumulative increase)
2. [Deleted. Replaced by CAM condition]
3. [Deleted. Replaced by CAM condition]
4. The owner/operator shall ensure A-21 Baghouse No.5 outlet grain loading does not exceed 0.01 gr/dscf. (basis: cumulative increase; 40 CFR 63.7690(a)(5)(i))

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5. [Deleted. Moved sand throughput limit to S-3 Sand Preparation]
6. Unless otherwise indicated in specific permit conditions, the owner/operator shall maintain the following records for S-2:
 - a. monthly throughput of iron poured
 - b. total material throughput for the preceding 12 months (basis: Regulation 2-1-403)
7. The owner/operator shall perform District-approved source tests at least once every 5 years for VOC to demonstrate compliance with Regulation 8, Rule 2. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section in writing of the source test protocols and projected test dates at least 7 days prior to testing. All measurements, records, and data for each source test shall be retained by the owner/operator for at least five years and made available to the District upon request. (basis: Regulation 2-1-403)
8. The owner/operator shall ensure total iron cast in S-58 and S-59 at this facility shall not exceed 36,000 tons in any consecutive 12-month period. (basis: cumulative increase)

Permit Condition 25039

Compliance Assurance Monitoring (CAM) condition

Parts 1 through 13 apply to the following sources and abatement devices:

S-2 Pouring Cooling Shakeout abated by A-14 Baghouse #2, ~~A-18 Baghouse #4~~

S-3 Sand Preparation abated by A-15 Baghouse #1

S-4 Wheelabrator Shot Blast (No.1) abated by A-17 Baghouse #3

S-5 Pangborn Shot Blast (No. 2) abated by A-17 Baghouse #3

S-27 Wheelabrator Shot Blast (No. 3) abated by A-17 Baghouse #3

S-30 Inline Shot Blast abated by A-17 Baghouse #3

S-49 Casting Grinding abated by A-14 Baghouse #2 (exempt source abated by the same abatement device as a regulated source subject to CAM)

1. The following definitions apply to the Compliance Assurance Monitoring plan for sources with associated abatement device mentioned above to assure compliance with Regulation 6:
 - a. The following is defined as an exceedance:
 - i. a visible emission detected using EPA Method 9 which is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree for more than 3 minutes in any hour.
 - b. The following are defined as excursions:
 - i. any visible emissions detected using EPA Method 22-like observation;
 - ii. a pressure drop across a baghouse cell in inches of water column that is less than 2 inches or greater than 10 inches.
(Basis: 40 CFR Part 64.6(c)(2))

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2. The owner/operator shall perform at least one 6-minute EPA Method 22-like observation for qualitative visible emissions on the above sources and associated abatement devices at least once every week to ensure compliance with SIP Regulation 6-301. (basis: 40 CFR Part 64.6(c)(1); 40 CFR Part 64.6(c)(3))
3. The owner/operator shall equip the above abatement devices with differential pressure gauges that measure the pressure drop across each baghouse cell in inches of water column. The gauges shall have a minimum accuracy of 0.5 inches water column. (Basis: 40 CFR Part 64.6(c)(1))
4. The indicator range that assures no visible emissions from the above sources and their associated abatement devices shall be a pressure drop across a baghouse cell of 2 to 10 inches of water column. (40 CFR Part 64.3(a)(2))
5. The owner/operator shall take a reading of the differential pressure gauges at least once per day. The pressure readings shall be recorded in a District-approved log. (Basis: 40 CFR Part 64.6(c)(3); 40 CFR Part 64.3(b)(4)(iii))
6. The pressure gauges shall be visually inspected prior to use and the owner/operator shall ensure that the gauges are calibrated in accordance with AB&I's Operation and Maintenance Plan (non-NESHAP). (Basis: 40 CFR Part 64.3(b)(3) and (b)(2))
7. If an excursion occurs at any of the sources above, the owner/operator shall follow the corrective action plan contained in AB&I's Operation and Maintenance Plan (non-NESHAP). If excursions continue to occur, the District may require the owner/operator to develop and implement a Quality Improvement Plan (QIP). (Basis: 40 CFR Parts 64.6(c)(3), 64.7(d)(2), 64.8)
8. If 2 or more excursions at the same abatement device occur within two weeks, a certified observer shall perform a Method 9 observation on the associated abatement device within 48 hours of the second excursion. (Basis: 40 CFR Part 64.6(c)(3); 40 CFR Part 64.3(b)(4)(iii))
9. The owner/operator of the above sources and their associated abatement devices shall submit a monitoring report to the District in accordance with 40 CFR Part 70.6(a)(3)(iii) (every six months). The report shall include all of the following information:
 - a. Summary information on the number, duration, and cause of excursions or exceedances and the corrective actions taken;
 - b. Summary information on the number, duration, and cause for monitor downtime incidents.(Basis: 40 CFR Part 64.6(c)(3) and 40 CFR Part 64.9(a)(2))
10. The owner/operator shall inspect, operate and maintain each baghouse and monitoring device in accordance with AB&I's Operation and Maintenance Plan (non-NESHAP). (Basis: 40 CFR Part 64.6(c)(1)(iii))
11. The owner/operator shall perform source tests for the above sources and their associated abatement devices at least once every 5 years to demonstrate with compliance with PM limits and opacity limits. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test

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Section, in writing, of the source test protocols and projected test dates at least 7 days prior to testing, excluding Method 9 observations performed for Part 8 above. (Basis: Regulation 2-1-403)

12. The owner/operator shall keep the records, including dates and time, of the pressure drop measurements, visible emission observations, calibrations, inspections, maintenance, monitor downtime incidents, test results, excursions, exceedances, and corrective action taken for at least 5 years and shall make the records available to District staff upon request. (Basis: Regulation 2-6-501 Recordkeeping)
13. The owner/operator shall submit AB&I's Operation and Maintenance Plan (non-NESHAP) to the District's Engineering Division and Compliance and Enforcement Division for review and approval within 30 days of issuance of the Title V permit renewal in 2012. AB&I's Operation and Maintenance Plan (non-NESHAP) shall include a monitoring plan, a corrective action plan, a list of frequently needed spare parts that shall be kept onsite, details, procedures, and frequency of inspections, preventative maintenance, and recordkeeping, and documentation templates. Any changes to AB&I's Operation and Maintenance Plan (non-NESHAP) must be submitted to the District's Engineering Division and Compliance and Enforcement Division for review and approval 21 days prior to being implemented. If the District does not provide a response within 21 days, the facility may implement the plan. (Basis: 40 CFR Part 64.6(c)(1)(iii))

Parts 14 through 28 apply to the following sources and abatement devices equipped with bag leak detectors:

S-1 Cupola abated by A-20 and A-22 Afterburners and A-19 Baghouse

S-2 Pouring Cooling Shakeout abated by A-21 Baghouse #5, [A-63 Baghouse #4](#)

14. The following definitions apply to the Compliance Assurance Monitoring plan for sources with associated abatement devices mentioned above to assure compliance with Regulation 6:
 - a. The following is defined as an exceedance:
 - i. a visible emission detected using EPA Method 9 which is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree for more than 3 minutes in any hour.
 - b. The following are defined as excursions:
 - i. Detection by the bag leak detector of particulate matter emissions at concentrations of greater than 10 milligrams per actual cubic meter for 15 minutes or longer;
 - ii. a pressure drop across a baghouse cell in inches of water column that is less than 2 inches or greater than 10 inches.(Basis: 40 CFR Part 64.6(c)(2))
15. The owner/operator shall equip each of the above abatement devices with a bag leak detector that complies with 40 CFR Part 63, Subpart EEEEE (NESHAPs for Iron and Steel Foundries) (Basis: 40 CFR Part 64.6(c)(1); 40 CFR Part 64.6(c)(3))
16. The owner/operator shall equip A-19, ~~and~~ A-21, [and A-63](#) bag leak detection systems with an alarm system. Following an alarm, owner/operator shall follow the corrective action procedures in AB&I's Operation and Maintenance Plan (NESHAP), developed and maintained in accordance with 40 CFR Part 63, Subpart EEEEE. (Basis: 40 CFR Part 64.6(c)(1))

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17. The concentration of particulate matter emissions that assures no visible emissions from A-19, ~~and A-21~~, and A-63 shall be less than 10 milligrams per actual cubic meter. (Basis: 40 CFR Part 64.3(a)(2))
18. The owner/operator shall visually inspect and test the bag leak detection sensors in accordance with AB&I's Operation and Maintenance Plan (NESHAP), developed and maintained in accordance with 40 CFR Part 63, Subpart EEEEE. (Basis: 40 CFR Part 64.3(b)(3) and (b)(2))
19. The owner/operator shall equip the above abatement devices with differential pressure gauges that measure the pressure drop across each baghouse cell in inches of water column. The gauges shall have a minimum accuracy of 0.5 inches water column. (Basis: 40 CFR Part 64.6(c)(1))
20. The indicator range that assures no visible emissions from the above sources and their associated abatement devices shall be a pressure drop across a baghouse cell of 2 to 10 inches of water column. (40 CFR Part 64.3(a)(2))
21. The owner/operator shall take a reading of the pressure gauges at least once per day. The pressure readings shall be recorded in a District-approved log. (Basis: 40 CFR Part 64.6(c)(3); 40 CFR Part 64.3(b)(4)(iii))
22. The pressure gauges shall be visually inspected prior to use and the owner/operator shall ensure that the gauges are calibrated in accordance with AB&I's Operation and Maintenance Plan (NESHAP), developed and maintained in accordance with 40 CFR Part 63, Subpart EEEEE. (Basis: 40 CFR Part 64.3(b)(3) and (b)(2))
23. If an excursion occurs at any of the sources above, the owner/operator shall follow the corrective action plan contained in AB&I's Operation and Maintenance Plan (NESHAP), developed and maintained in accordance with 40 CFR Part 63, Subpart EEEEE. If excursions continue to occur, the District may require the owner/operator to develop and implement a Quality Improvement Plan (QIP). (Basis: 40 CFR Parts 64.6(c)(3), 64.7(d)(2), 64.8)
24. If 2 or more excursions at the same abatement device occur within two weeks, a certified observer shall conduct a Method 9 on the associated abatement device within 48 hours of the second excursion. (Basis: 40 CFR Part 64.6(c)(3); 40 CFR Part 64.3(b)(4)(iii))
25. The owner/operator of the above sources and their associated abatement devices shall submit a monitoring report to the District in accordance with 40 CFR Part 70.6(a)(3)(iii) (every six months). The report shall include all of the following information:
 - a. Summary information on the number, duration, and cause of excursions or exceedances and the corrective actions taken;
 - b. Summary information on the number, duration, and cause for monitor downtime incidents.(Basis: 40 CFR Part 64.6(c)(3) and 40 CFR Part 64.9(a)(2))
26. The owner/operator shall inspect each baghouse and monitoring system in accordance with AB&I's Operation and Maintenance Plan (NESHAP), developed and maintained in accordance with 40 CFR Part 63, Subpart EEEEE. (Basis: 40 CFR Part 64.6(c)(1)(iii))
27. The owner/operator shall perform source tests for the above sources and their associated abatement devices at least once every 5 years to demonstrate with compliance with PM limits

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and opacity limits. The owner/operator shall obtain approval for all source test procedures from the District's Source Test Section prior to conducting any tests. The owner/operator shall comply with all applicable testing requirements as specified in Volume V of the District's Manual of Procedures. The owner/operator shall notify the District's Source Test Section, in writing, of the source test protocols and projected test dates at least 7 days prior to testing, excluding the Method 9 observations taken per Part 24 above. (Basis: Regulation 2-1-403)

28. The owner/operator shall keep the records, including dates and time, of the pressure drop measurements, visible emission observations, calibrations, inspections, maintenance, monitor downtime incidents, test results, excursions, exceedances, and corrective action taken for at least 5 years and shall make the records available to District staff upon request. (Basis: Regulation 2-6-501 Recordkeeping)

RECOMMENDATION

Issue an Authority to Construct for the following:

- A-63 Baghouse #4: Make BHM, Model 663-10-6RA 65,000 CFM Rating; Abating S-2, Pouring, Cooling and Shakeout.**

By: _____
Xuna Cai
Senior Air Quality Engineer

Date: _____

AB&I Foundry

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EVALUATION REPORT

AB&I Foundry

Application #27952 - Plant #62

I. BACKGROUND

AB&I Foundry has applied for an administrative Change of Permit Conditions to Condition # 25748 to allow the use of an alternative grey colored coating at S-51 “Specialty Finishing Paint Dip Tank”.

Most of AB&I production is casting pipe and fittings, but they also have custom castings. Currently, this is a small portion of the products they cast. S-51 is used for these custom castings using a water-based acrylic coating. S-51 was evaluated as a new source under Application # 24453 in 2014. Permit condition 25748 limits the coating use at S-51 to 1,000 gallons/year of a Black Rust Inhibitor (VOC = 0.55 lb/gal) and 500 gallons/year of an Aqua Corrosion Resistant Grey (VOC = 0.88 lb/gal). AB&I has not requested any changes to the permitted quantities of black and grey coating but want the option to use another grey (Water Resistant Emulsion Satin Grey) at S-51.

II. EMISSION CALCULATIONS

Current Permit

The POC emission from S-51 were already calculated in Application # 24453:

$$\text{POC/NPOC} = 1,000 \text{ gal/year (0.55 lb/gal)} + 500 \text{ gal/year (0.88 lb/gal)} = 990 \text{ lbs/year} = 0.5 \text{ TPY}$$

The VOC and TAC composition (butyl cellosolve 5% by wt.) of the Water Resistant Emulsion Satin Grey coating that will be used at S-51 is similar to the Aqua Corrosion Resistant grey coating currently used at S-51.

The proposed administrative change to permit condition 25748 permitting the use of Water Resistant Emulsion Satin Grey coating at S-51 will not result in a cumulative increase in POC/NPOC emissions and/or an increase TAC emissions.

III. STATEMENT OF COMPLIANCE

S-51 is subject to and in compliance with Regulation 8-19, Miscellaneous Coating of Metal Parts and Products, because the VOC content of the coating is less than 2.8 lb/gal.

Because the estimated emissions of POC is not estimated to exceed 10 pounds per day, Best Available Control Technology (BACT) review is not triggered.

Offsets

There is no change in cumulative increase. Therefore, offsets are not required.

PSD

Regulation 2-2-304: District PSD requirements apply to emissions of SO₂, NO₂, CO, and PM₁₀. Since this facility is not a major facility for any of these pollutants, the PSD requirements do not apply.

CEQA

AB&I has submitted an Appendix H in accordance with Regulation 2-1-312.

This project is considered to be categorically exempt under the District's CEQA Regulation 2-1-312-1 for a permit modification for an existing permitted source at the facility which does not involve any increase in emissions or physical modification, and therefore is not subject to CEQA review. Also the Air District has determined that this action is exempt from CEQA because the permitting of the project involves no expansion of use beyond that existing at the time of the Air District's CEQA determination (CEQA § 21084; Guidelines § 15301). The Air District's action is also exempt under the “common sense” exemption. (Guidelines § 15601(b)(3)).

Permit Evaluation and Statement of Basis: Site No. A0062

AB&I Foundry

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---Toxics

The proposed administrative change to permit condition 25748 permitting the use of Water Resistant Emulsion Satin Grey coating at S-51 will not result in emissions of butyl cellosolve above the Acute Trigger Level of 31 lbs/hour. Therefore, a HRSA is not required.

NESHAPS

S-51 is subject to NESHAP 40 CFR 63, Subpart M, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products. S-51 complies with the NESHAP because the coatings used in it have an organic HAP content of 0.9 lb/gallon, which is below the NESHAP limit of 1.9 lb organic HAP/gallon of coating solids.

Water's Bill

The project is not within 1,000 feet from the nearest school. Therefore, this application is not subject to the public notification requirements of Regulation 2-1-412.

Regulation 3 – Fees

The company has complied with fee requirements for this permit application.

IV. CONDITIONS

Currently, S-51 is subject to Condition Number 25748. I recommend the following Change of Conditions to Condition # 25748 (underlines indicate additions)

Condition Number 25748

1. The owner/operator of S-51 shall not exceed the following usage limits during any consecutive twelve-month period:

Water Reducible Black Rust Inhibitor	1000 Gallons
Aqua Corrosion Resistant Grey/ <u>Water Resistant Emulsion Satin Grey</u>	500 Gallons

(Basis: Cumulative Increase)
2. The owner/operator may use coating(s) or cleanup solvent(s) other than the materials specified in Part 1 and/or usages in excess of those specified in Part 1, provided that the owner/operator can demonstrate that all of the following are satisfied:
 - a. Total POC emissions from S-51 do not exceed 990 pounds in any consecutive twelve month period;
 - b. Total NPOC emissions from S-51 do not exceed 990 pounds in any consecutive twelve month period; and
 - c. The use of these materials does not increase toxic emissions above any risk screening trigger level of Table 2-5-1 in Regulation 2-5.

(Basis: Cumulative Increase; Toxics)
3. To determine compliance with the above parts, the owner/operator shall maintain the following records and provide all of the data necessary to evaluate compliance with the above parts, including the following information:
 - a. Quantities of each type of coating and cleanup solvent used at this source on a monthly basis.
 - b. If a material other than those specified in Part 1 is used, POC/NPOC and toxic component contents of each material used; and mass emission calculations to demonstrate compliance with Part 2, on a monthly basis;
 - c. Monthly usage and/or emission calculations shall be totaled for each consecutive twelve-month period.

Permit Evaluation and Statement of Basis: Site No. A0062

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All records shall be retained on-site for two years, from the date of entry, and made available for inspection by District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District Regulations.
(Basis: Cumulative Increase; Toxics)

V. RECOMMENDATION

I recommend the change of conditions indicated in Section IV.

Carol Lee
Senior Air Quality Engineer

Date: _____

AB&I Foundry

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EVALUATION REPORT

AB&I Foundry

Application #28000 - Plant #62

I. BACKGROUND

AB&I Foundry (AB&I) has applied for a Change of Conditions to Condition # 21322 to allow the use of an alternative white ink at S-32 Flow Jet Pipe Labeler.

AB&I is currently permitted to use SCP-920A White Ink at S-32. The manufacturer of the White Ink recently changed the chemical composition of the ink by adding Isopropanol (IPA) and Methyl Ethyl Ketone (MEK). The majority of the solvent in the ink is still acetone and AB&I will continue using acetone for cleanup. AB&I have not requested any changes to the material usage limits and have submitted this application to ensure the change in ink formulation is correctly reflected in permit condition 21322 when it is revised.

II. EMISSION CALCULATIONS

Current Permit

Annual emissions from S-32 when it was previously reviewed under Application Number 16365 are as shown below:

Basis: 2,500 gals/yr White Ink; 1,000 gals/yr Acetone (cleanup solvent):

POC = 2500 gals/yr(0 lb/gal) = 0 lbs/yr = 0 TPY

NPOC = 2500 gals/yr(6.52 lb/gal) + 1000 gals/yr(6.58 lb/gal) = 22,880 lbs/yr = 11.44 TPY

Modified Permit

Annual emissions from S-32 with the new White Ink formulation reviewed under this application (# 28000) are as shown below:

Basis: 2,500 gals/yr White Ink; 1,000 gals/yr Acetone (cleanup solvent):

POC = 2500 gals/yr(0.42 lb/gal) = 1,050 lbs/yr = 0.525 TPY

(NPOC_{INK} = 60% Acetone + 30% T-Butyl Acetate = 60%(6.58 lb/gal)+30%(7.17 lb/gal) = 6.10 lb/gal)

NPOC = 2500 gals/yr(6.10 lb/gal) + 1000 gals/yr(6.58 lb/gal)

NPOC = 21,830 lbs/yr = 10.92 TPY

Cumulative Increase

While emissions of NPOC will remain the same or reduce, there is a POC cumulative increase for this application:

POC = (0.525 – 0) TPY = 0.525 TPY

POC = 4.2 lbs/day (Basis: 250 operating days/year) < 10 lb/day (BACT trigger)

TOXICS

The material safety data sheet for the ink shows methyl ethyl ketone and isopropanol, which are two new POC and toxic air contaminants in the ink. However, the total estimated POC emissions are less than the toxic risk screening trigger level for each toxic air contaminant:

POC = 1,050 lb/yr < 2.7E+05 lbs/yr (Isopropanol trigger)

Basis: 250 days/yr and 4 hrs/day of operation:

POC = 1.05 lb/hr < 29 lbs/hr (MEK trigger)

< 7.1 lbs/hr (Isopropanol trigger)

As a result, there is no toxic risk screening required for this change of ink composition.

AB&I Foundry

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III. STATEMENT OF COMPLIANCE

S-32 is used with stencils to label pipe with identifying letters and numbers. Because this process involves stencils, the coating used at S-32 is exempt from the requirements of Regulation 8-19, Miscellaneous Coating of Metal Parts and Products, per Regulation 8-19-117. Therefore, S-32 is subject to the requirements of Regulation 8-4 “General Solvent and Surface Coating Operations”. S-32 is subject to and in compliance with the 5 TPY VOC limit per Regulation 8-4-302. S-32 will also comply with the solvent evaporative loss minimization standards of Regulation 8-4-312 and the wipe cleaning standards of Regulation 8-4-312 by using acetone as the cleaning solvent.

BACT

While emissions of NPOC will remain the same or less, there is a POC cumulative increase for this application. However, the total POC emissions are less than the Best Available Control Technology (BACT) trigger level of 10 lbs/day. As a result, BACT is not triggered.

Offsets

The current permit conditions limit POC emissions to 0 lbs/year. With the reformulated ink, there is a POC increase of 1,050 lbs/yr or 0.525 TPY. Because this facility has the potential to emit more than 35 TPY of POC, the following offsets are required:

$$\text{Offsets Required} = 0.525 \text{ TPY} (1.15 \text{ offset ratio}) = 0.60 \text{ TPY}$$

The facility has provided Banking Certificate # 1546 to provide the required offsets.

PSD

AB&I’s proposed use of an alternative white ink at S-32 is not a major modification as defined in Regulation 2-2-304. Therefore, the PSD requirements do not apply.

CEQA

AB&I has submitted an Appendix H in accordance with Regulation 2-1-312.

This project is considered to be categorically exempt under the District's CEQA Regulation 2-1-312.6 for a permit application relating exclusively to a minor alteration of existing sources involving no expansion of use beyond that previously existing. In addition, it is also categorically exempt under CEQA Regulation 2-1-312-11 for a permit application for a new or modified source or sources or for the process changes which will satisfy the “No Net Emission Increase” provisions of District Regulation 2, Rule 2, and for which there is no possibility that the project may have any significant environmental effect in connection with any environmental media or resources other than air quality. Also the Air District has determined that this action is exempt from CEQA because the permitting of the project involves no expansion of use beyond that existing at the time of the Air District’s CEQA determination (CEQA § 21084; Guidelines § 15301). The Air District’s action is also exempt under the “common sense” exemption. (Guidelines § 15601(b)(3)).

Water’s Bill

The project is not within 1000 feet from the nearest K-12 public schools. Therefore, this application is not subject to the public notification requirements of Regulation 2-1-412.

Regulation 3 – Fees

The company has complied with fee requirements for this permit application.

IV. CONDITIONS

Currently, S-32 is subject to Condition Number 21322. I recommend the following Change of Conditions to Condition # 21322 (underlines indicate additions while strikethrough indicate deletions)

AB&I Foundry

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Condition Number 21322

COND# 21322 -----

Condition #21322
Conditions for S-32

1. The owner/operator shall ensure that the net ink (SCP-920A) usage at S-32 Flow Jet Pipe Labeler does not exceed 2500 gallons totaled over any consecutive twelve month period.
(Basis: Cumulative Increase)
2. The owner/operator shall ensure that the net cleanup solvent (SCP-900C) usage at S-32 Flow Jet Pipe Labeler does not exceed 1000 gallons totaled over any consecutive twelve month period.(Basis: Cumulative Increase)
3. Inks and cleanup solvents other than those specified in parts 1 and 2 may be used at S-32 provided that the owner/operator can demonstrate that all of the following requirements are satisfied:
 - a. Total POC emissions from S-32 do not exceed 41,050 pounds totaled over any consecutive 12 month period.
 - b. Total NPOC emissions from S-32 do not exceed 22,880 pounds totaled over any consecutive 12 month period.
 - c. The use of these materials does not result in the emission of any toxic air contaminant above its risk screening trigger level as specified in the BAAQMD Regulation 2, Rule 5.
(Basis: Cumulative Increase, BAAQMD Regulation 2-5)
4. The owner/operator shall maintain the following records to demonstrate compliance with the above conditions:
 - a. Type, POC content, NPOC content, and monthly usage of all POC and NPOC containing materials used at S-32
 - b. For materials other than those specified in parts 1 and 2 that are utilized at S-32: toxic air contaminant contents of each material used and mass emission calculations to demonstrate compliance with part 3, summarized on a monthly basis
 - c. Monthly usage and/or emission calculations shall be totaled for each consecutive twelve-month period (basis: Cumulative Increase, BAAQMD Regulation 2-5)

AB&I Foundry

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IV. RECOMMENDATION

I recommend the change of conditions indicated in Section IV.

Carol Lee
Senior Air Quality Engineer

Date: _____

AB&I Foundry

7825 San Leandro Street, Oakland, CA 94621

EVALUATION REPORT

AB&I Foundry

Application #28038 - Plant #62

I. BACKGROUND

AB&I Foundry (AB&I) has applied for permit exemption for an aqueous Cold Cleaner (S-63) which will be used for cleaning and washing maintenance/industrial equipment and parts. The Cold Cleaner is a non-heated system with a 37-gallon maximum capacity which will be using an aqueous cleaner, Bio-Circle CB-100, for cleaning parts.

II. EMISSION CALCULATIONS

The Material Safety Sheet for Bio-Circle CB100 aqueous cleaner indicates that it contains does not contain any volatile organic compounds (VOC = 0). It is made up of a 5-10% ethylated alcohol which is not a listed toxic air contaminant in Table 2-5-1 of Regulation 2-5.

Pursuant Regulation 2-1-118.4, S-63 Cold Cleaner is exempt from permitting requirements because it uses a unheated solution with a VOC content less than or equal to 50 grams per liter (0.42 lb/gal).

Because S-63 is an exempt source, there is no cumulative increase for this application:

III. STATEMENT OF COMPLIANCE

S-63 is subject to and will be in compliance with Regulation 8-16-303. Pursuant Regulation 2-1-118.4, S-63 Cold Cleaner is exempt from the permitting requirements of Regulation 2-1-301 and 2-1-302 because it uses an unheated solution with a VOC content less than or equal to 50 grams per liter (0.42 lb/gal). In addition, pursuant to Regulation 8-16-124, it is not subject to the recordkeeping requirements of Regulation 8-16-501, but is subject to Regulation 8-16-502 (Burden of Proof).

Offsets

Because there is no POC cumulative increase for an exempt source, there is no offsets required for S-63 Cold Cleaner.

PSD

Because there is no cumulative increase for an exempt source, PSD is not triggered for S-63 Cold Cleaner.

CEQA

The exempt Cold Cleaner (S-63) is considered a ministerial project. As a result, it is not subject to the requirements of the California Environmental Quality Act (CEQA).

Water's Bill

The project is not within 1000 feet from the nearest school. Therefore, this application is not subject to the public notification requirements of Regulation 2-1-412.

Regulation 3 – Fees

The company has complied with fee requirements for this permit application.

IV. CONDITIONS

None.

AB&I Foundry

7825 San Leandro Street, Oakland, CA 94621

IV. RECOMMENDATION

I recommend a permit exemption be issued to AB&I for the following:

**S-63 Cold Cleaner, Bio-Circle, Model 55D610, 37 Gallon
(Exempt per Regulation 2-1-118.4)**

Carol Lee
Senior Air Quality Engineer

Date: _____

AB&I Foundry

7825 San Leandro Street, Oakland, CA 94621

EVALUATION REPORT

AB&I Foundry

Application #28616 - Plant #62

I. BACKGROUND

AB&I Foundry has applied for an administrative Change of Permit Conditions to Condition 24639 to allow the use of an alternative synthetic asphalt pipe coating at S-34, S-35, and S-36 Pipe Finishing Dip Tank Operation which meets the VOC content of 0.0401 lb/gal in part 3 of permit condition 24639. Permit condition 24639 was issued along with the AC/PO that was part of NSR Application # 21488 for S-34, S-35, S-36, and S-43 (which is no longer in service). Part 3 of permit condition 24639 currently restricts the facility to only use a synthetic asphalt pipe coating manufactured by “Professional Coating Tech., Inc.” AB&I has requested deleting “manufactured by Professional Coating Tech, Inc.” in part 3 of permit condition 24639.

AB&I’s proposed permit condition change would allow them to conduct testing and consider potential future use of alternative synthetic asphalt pipe coatings that will reduce odors from their dip tank operations. Under this application (# 28616), AB&I plans to conduct testing on a new coating product (SWT 7252) manufactured by SWT Group that has a VOC content of 0 percent¹. If the test is successful, AB&I plans to implement the product into the Pipe Finishing Dip Tank Operations (at S-34, S-35, and S-36).

II. EMISSION CALCULATIONS

Current Permit

POC emissions from S-34, S-35, and S-36 were estimated under Application 21488 to be 5.04 TPY and the cumulative increase was offset by contemporaneous emission reductions from the shutdown of solvent based dip tanks (S-13).

Permitted throughput in part 1 of permit condition 24639 = 251,442 gals/year
Permitted VOC content in part 3 of permit condition 24639 = 0.04 lb/gal
Permitted POC emissions = 5.04 TPY (251,442 x 0.0401 ÷ 2,000)

The proposed administrative change to part 3 of permit condition 24639 will delete the term “manufactured by Professional Coating Tech, Inc.” and will not result in an emissions increase.

In addition to governing S-34 through S-36, permit condition 24639 also governs S-43 “Pipe Finishing Dip Tank”, which is no longer in service. Part 1 of the above permit condition limits the combined net coating usage at the above sources to 251,442 gallons per year. Because S-43 is no longer in service and its net coating usage is limited by part 2 of the above permit condition to 2,000 gallons per year, the annual combined coating usage of 251,442 gallons will be reduced by 2,000 gallons to ensure there is no emissions increase at S-34 through S-36:

Revised net coating usage = 251,442 – 2,000 = 249,442 gallons/year

III. STATEMENT OF COMPLIANCE

S-34, S-35, and S-36 are subject to and in compliance with Regulation 8-19, Miscellaneous Coating of Metal Parts and Products, because the VOC content of the coating is less than 2.8 lb/gal.

¹ Per info submitted with A# 21488, Matrix labs had analyzed the current coating (SAPC-100 manufactured by Professional) under different test temperatures (at/below 500 F) and had determined the VOC and speciated the HAPs via GC/MS. Jimmy Dileo with AB&I confirmed over the phone on June 27th, 2017 that similar lab analysis will be done for SWT 7252 and/or for the alternate coating that is ultimately chosen, after the company has completed evaluating all alternate coatings. The lab analysis will confirm if the coating chosen will ensure compliance with the permit condition 24639.

Permit Evaluation and Statement of Basis: Site No. A0062

AB&I Foundry

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Because the proposed change to permit condition 24639 will not result in an emissions increase, BACT is not triggered, offsets are not required, and PSD does not apply.

CEQA

AB&I has submitted CEQA Form Appendix H (Environmental Information Form) in accordance with Regulation 2-1-426.

This project is categorically exempt under the District's CEQA Regulation 2-1-312.1 because the proposed administrative change to part 3 of permit condition 24639 will not result in an emissions increase. Therefore, the project is not subject to CEQA review. The District has also determined that this action is exempt from CEQA because the permitting of the project involves no expansion of use beyond that existing at the time of the Air District's CEQA determination (CEQA § 21084; Guidelines § 15301). The District's action is also exempt under the "common sense" exemption. (Guidelines § 15601(b)(3)).

Toxics

The proposed administrative change to permit condition 24639 permitting the use of alternative synthetic asphalt pipe coatings produced by manufacturers other than "Professional Coating Tech., Inc." will not result in any change to toxic emissions. Therefore, a HRSA is not required.

NESHAPS

S-34, S-35, and S-36 are subject to NESHAP 40 CFR 63, Subpart M, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products. The above sources are subject to the HAP limit of 1.9 lb organic HAP/gallon of coating solids during any 12-month period in 40 CFR 63.3890. Because the facility is expected to meet the compliant material option in 40 CFR 63.3891, it is not subject to the operating limits per 40 CFR 63.3892(a) or work practice standards per 40 CFR 63.3893(a).

Water's Bill

The project is not within 1,000 feet from the nearest school. Therefore, this application is not subject to the public notification requirements of Regulation 2-1-412.

Regulation 3 – Fees

The company has complied with fee requirements for this permit application.

IV. CONDITIONS

Currently, S-34, S-35, and S-36 are subject to Permit Condition Number 24639. S-43 "Pipe Finishing Dip Tank" which was permitted along with the above sources under Application 21488 in the 2010-11 timeframe was shut down and was therefore, archived in the District's database in September 2012. Therefore, S-43 and/or references pertaining to it have been deleted in permit condition 24639. I recommend the following Change of Conditions to Condition # 24639 (underlines indicate additions, strikethroughs indicate deletions)

Condition #24639

For

- S-34 P5-P6 Pipe Finishing Dip Tank: 114 Gallon Capacity; abated by A-35 Fiber Bed Mist Collector and A-36² Mist Eliminator
- S-35 P4 Pipe Finishing Dip Tank: 454 Gallon Capacity; abated by A-35 Fiber Bed Mist Collector and A-36 Mist Eliminator
- S-36 P2-P3 Pipe Finishing Dip Tank: 333 Gallon Capacity; abated by A-35 Fiber Bed Mist Collector and A-36 Mist Eliminator
- ~~S-43 P1 Pipe Finishing Dip Tank: 182 Gallon Capacity~~

² A-36 (mist eliminator) – whose primary purpose is odor control and which operates in parallel w/ A-35 (fiber bed mist collector) was reviewed under A# 24156 in the 2012 timeframe.

Permit Evaluation and Statement of Basis: Site No. A0062

AB&I Foundry

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1. The owner/operator shall ensure the annual net coating usage at S-34, 35, ~~and S-36 and S-43~~ Pipe Finishing Dip Tanks does not exceed a combined total throughput of ~~249,442 251,442~~ gallons (~~10814090~~ tons) over any consecutive twelve month period. (basis: Cumulative Increase, Offsets, Toxics)
2. ~~The owner/operator shall ensure the annual net coating usage at S-43 P1 Pipe Finishing Dip Tank does not exceed 2,000 gallons over any consecutive twelve month period. (basis: Cumulative Increase)~~ S-43 was shutdown and removed from operation 09/07/2012.
3. The owner/operator shall use exclusively synthetic asphalt pipe coating (~~manufactured by Professional Coating Tech., Inc.~~) at S-34, 35, ~~and S-36 and S-43~~ Pipe Finishing Dip Tanks ~~to~~ ~~and~~ ensure the VOC content of the asphalt does not exceed 0.04 lb/gal. (basis: Cumulative Increase)
4. The owner/operator shall ensure S-34, S-35 and S-36 are continuously abated by A-35 Fiber Bed Mist Collector and A-36 Mist Eliminator during all periods of operation. (Basis: Cumulative Increase)
5. The owner/operator shall equip the A-35 Fiber Bed Mist Collector and A-36 Mist Eliminator with a pressure gauge and operate and maintain the abatement device according to manufacturer's instructions³. (Basis: Cumulative Increase)
6. The owner/operator shall ensure the operating temperature of each hot dip tank (S-34 or S-35 or S-36 ~~or S-43~~) does not exceed 500oF. (Basis: Cumulative Increase, Toxics)
7. The owner/operator of S-34, S-35, ~~and S-36 and S-43~~ shall install and operate a temperature measuring and recording device to continually monitor and record the temperature of the heated asphalt bath at each source. This record shall be kept for a period of at least 5 years from date of entry. (Basis: Toxics, Cumulative Increase, monitoring)
8. The owner/operator shall not use any cleanup solvent at S-34, S-35, ~~and S-36 and S-43~~. (Basis: Cumulative Increase, Toxics)
9. ~~In the event there is one District confirmed odor complaint, the owner/operator shall submit an abatement plan to the District Engineering Division for S-43. If required, the owner/operator shall install a District approved abatement device upon approval from the District. (Basis: Regulation 1-301)~~ S-43 was shutdown and removed from operation 09/07/2012.
10. In the event this operation causes a public nuisance under Regulation 1-301 due to odors, the owner/operator shall submit a comprehensive odor abatement plan to eliminate or sufficiently reduce odors to tolerable levels at the facility to the District's Engineering Division within 30 days of the public nuisance. The owner/operator shall obtain District approval of the odor abatement plan and comply with the District-approved odor abatement plan. The plan shall be modified and re-approved by the District as necessary to keep odors at tolerable levels at the facility. Tolerable odor levels shall be odor levels that do not result in a public nuisance. (Basis: Public Nuisance, Regulation 1-301)

³ Jimmy Dileo with AB&I confirmed over the phone on June 27th, 2017 that the parameters monitored are pressure drop (inches water column) and fan amperage (amps). Δp is monitored once a day and corrective action is taken (clean/replace filters, etc.) if the measurement exceeds 14" w.c. Likewise, fan amperage is monitored to ensure it is below 58 amps to ensure the fan is not drawing more than what it is designed to do.

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11. The owner/operator of S-34, S-35, and S-36 ~~and S-43~~ shall maintain monthly records, in a District approved log, of the total net usage of asphalt coating (in gallons) used at all of these sources. In addition, the owner/operator shall maintain monthly records, in a District approved log, of the estimated net asphalt coating (in gallons) used at each source. Furthermore, the owner/operator shall maintain monthly records, in a District-approved log, of the following: a) the operating hours of S-34, S-35, and S-36, ~~and S-43~~, b) the operating hours of A-35 Fiber Bed Mist Collector and A-36 Mist Eliminator, and c) the maintenance records for A-35 Fiber Bed Mist Collector and A-36 Mist Eliminator. All records shall be retained for a period of at least five years from date of entry. This log shall be kept on site and made available to the District's staff upon request. (Basis: Recordkeeping)
12. [Deleted. Cutback asphalt dip tanks shut down on 7/21/2010, 12/16/2010, and 6/30/2010.]

V. RECOMMENDATION

I recommend the change of conditions indicated in Section IV.

Carol Lee
Senior Air Quality Engineer

Date: _____

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APPENDIX B: GLOSSARY

AB&I Foundry

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ACT

Federal Clean Air Act

APCO

Air Pollution Control Officer

ARB

Air Resources Board

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

BARCT

Best Available Retrofit Control Technology

Basis

The underlying authority which allows the District to impose requirements.

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CAM

Compliance Assurance Monitoring per 40 CFR Part 64

CAPCOA

California Air Pollution Control Officers Association

CEM

Continuous Emission Monitor

CEQA

California Environmental Quality Act

CFR

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

CO₂

Carbon Dioxide

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CO

Carbon Monoxide

Cumulative Increase

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Cumulative increase is used to determine whether threshold-based requirements are triggered.

District

The Bay Area Air Quality Management District

dscf

Dry Standard Cubic Feet

dscm

Dry Standard Cubic Meter

EPA

The federal Environmental Protection Agency.

Excluded

Not subject to any District regulations.

Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (MACT), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA-approved program that has been incorporated into the SIP.

FP

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

grain

1/7000 of a pound

HAP

Hazardous Air Pollutant. Any pollutant listed pursuant to Section 112(b) of the Act. Also refers to the program mandated by Title I, Section 112, of the Act and implemented by 40 CFR Part 63.

Major Facility

A facility with potential emissions of: (1) at least 100 tons per year of regulated air pollutants, (2) at least 10 tons per year of any single hazardous air pollutant, and/or (3) at least 25 tons per year of any combination of hazardous air pollutants, or such lesser quantity of hazardous air pollutants as determined by the EPA administrator.

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MFR

Major Facility Review. The District's term for the federal operating permit program mandated by Title V of the Federal Clean Air Act and implemented by District Regulation 2, Rule 6.

MOP

The District's Manual of Procedures.

NAAQS

National Ambient Air Quality Standards

NESHAPS

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63.

NMHC

Non-methane Hydrocarbons (Same as NMOC)

NMOC

Non-methane Organic Compounds (Same as NMHC)

NO_x

Oxides of nitrogen.

NSPS

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

NSR

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NO_x, PM₁₀, and SO₂.

Phase II Acid Rain Facility

A facility that generates electricity for sale through fossil-fuel combustion and is not exempted by 40 CFR 72 from Titles IV and V of the Clean Air Act.

POC

Precursor Organic Compounds

PM

Particulate Matter

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PM10

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

PSD

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

PTE

Potential to Emit as defined by BAAQMD Regulation 2-6-218

SIP

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

SO2

Sulfur dioxide

SO₃

Sulfur trioxide

THC

Total Hydrocarbons (NMHC + Methane)

therm

100,000 British Thermal Units

THC

Total Hydrocarbons (NMHC + Methane)

Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

TOC

Total Organic Compounds (NMOC + Methane, Same as THC)

TPH

Total Petroleum Hydrocarbons

TRMP

Toxic Risk Management Plan

TSP

Total Suspended Particulate

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VOC

Volatile Organic Compounds

Units of Measure:

bhp	=	brake-horsepower
btu	=	British Thermal Unit
cu. ft.	=	cubic foot
cfm	=	cubic feet per minute
dscf	=	dry standard cubic foot
dscfm	=	dry standard cubic foot per minute
g	=	gram
gal	=	gallon
gpm	=	gallons per minute
gr	=	grain
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inch
max	=	maximum
m ²	=	square meter
min	=	minute
mm	=	million
MMbtu	=	million btu
MMcf	=	million cubic feet
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
tpy	=	tons per year
yr	=	year

Symbols:

<	=	less than
>	=	greater than
≤	=	less than or equal to
≥	=	greater than or equal to