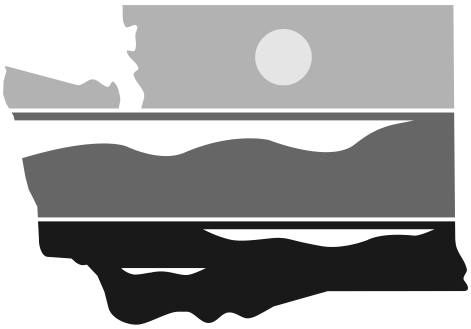


DEPARTMENT OF
ECOLOGY
State of Washington

Washington State Department of Ecology
Eastern Region Office
4601 N. Monroe Street
Spokane, Washington 99205-1295

Statement of Basis for
Air Operating Permit Number DRAFT
D&L Foundry
Moses Lake, Washington

Table of Contents

List of Abbreviations

AOP	Air Operating Permit
BACT	Best Available Control Technology
BTU	British Thermal Units
°C	Degrees Celsius
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COMS	Continuous Opacity Monitoring System
dscf	Dry Standard Cubic Foot
dscf/m	Dry Standard Cubic Foot per minute
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
°F	Degrees Fahrenheit
FCAA	Federal Clean Air Act
ft^3	Cubic foot
gr/dscf	Grains per dry standard cubic foot
hr	Hour
lb	Pound
MMBtu	Million British Thermal Units
MRRR	Monitoring, Recordkeeping, and Reporting Requirement
NOC	Notice of Construction
NO_x	Oxides of Nitrogen
NSPS	New Source Performance Standard
O_2	Oxygen
O&M	Operation & Maintenance
P.E.	Professional Engineer
PM	Particulate Matter
PM-10	Particulate Matter with aerodynamic diameter $\leq$ 10 micrometers
ppm	Parts per million
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RCW	Revised Code of Washington
RM	EPA Reference Method from 40 CFR Part 60, Appendix A
scfm	Standard Cubic Feet per Minute
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
T	Temperature
TAP	Toxic Air Pollutant
TPD	Tons Per Day
TPY	Tons Per Year
TSP	Total Suspended Particulate
VOC	Volatile Organic Compound
WAC	Washington Administrative Code
w%	Percentage by Weight
yr	Year

1) Introduction

This statement of basis summarizes the legal and factual basis for the air operating permit issued by the Washington State Department of Ecology. Unlike the air quality permit, this document is not legally enforceable. This Statement of Basis summarizes the emitting facility processes, air emissions, permitting and compliance history, the statutory or regulatory provisions that relate to the facility, and the steps taken to provide opportunities for public review of the permit. The permittee is obligated to follow the terms of the permit. Any errors or omissions in the summaries provided here do not excuse the permittee from the requirements of the permit.

2) Permit Authority

Title V of the Federal Clean Air Act Amendments required all states to develop a renewable operating permit program for industrial and commercial sources of air pollution. The Washington State Clean Air Act (RCW 70A.15 Revised Code of Washington) was amended in 1991, 1993, and 2020 to provide the Department of Ecology and Local Air Agencies with the necessary authority to implement a state-wide operating permit program. The law requires all sources emitting one hundred tons or more per year of a criteria pollutant, 10 tons of a hazardous air pollutant, or 25 tons in the cumulative of hazardous air pollutants, to obtain an operating permit. Criteria pollutants include sulfur dioxide, nitrogen oxides, particulate matter, carbon monoxide, and volatile organic compounds.

Chapter 173-401 of the Washington Administrative Code (WAC), which specified the requirements of Washington State's Operating Permit Regulation, became effective November 4, 1993. United States Environmental Protection Agency (EPA) granted Washington's program interim approval December 9, 1994. Final approval of Washington's program was granted on August 13, 2001. The current version of the regulation was filed on September 16, 2002.

3) Facility Information

a) Company Name ..... D&L Foundry
b) Facility Name ..... D&L Foundry
c) Unified Business Identification Number 603-103-624
d) Facility Address ..... 12970 Wheeler Road, Moses Lake, WA 98837
e) Facility Contact ..... Adam Kroupa
f) Contact Phone Number ..... (509) 765-7952

4) Basis for Title V Applicability

WAC 173-401-200(19)(a) and (b) identify any source that emits or has the potential to emit one hundred tpy or more of any air pollutant, 10 tons of any HAP, or 25 tpy of any

combination of HAP listed in §112(b) of the FCAA as a major source. Major sources are required to obtain Title V permits under 173-401-300(1)(a)(i).

D&L Foundry (D&L) has the potential to emit Carbon Monoxide (CO) in excess of 100 tons per year.

Attachment 1: Facility Potential to Emit (tons per year) w/ controls

	PM	SOx	NOx	VOC	CO	Lead
Scrap Preheater (Preheater A)	1.69	0.01	1.55	0.09	1.30	Negligible
EIFs (Furnace System A)	4.51	n/a	n/a	0.66	3.07	n/a
Pouring and Cooling (61' Stack)	3.26	0.44	0.22	1.09	128.64	0.01
Sand Handling System A	16.89	n/a	n/a	n/a	n/a	n/a
Shakeout A	16.89	n/a	n/a	n/a	22.12	n/a
Shakeout (Sand No.3)	15.02	n/a	n/a	n/a	7.01	n/a
Through Blast A (Shotblast)	1.88	n/a	n/a	n/a	n/a	n/a
Grinding (Cast Cleaning, Grind)	15.02	n/a	n/a	n/a	n/a	n/a
Paint Booth	n/a	n/a	n/a	0.30	n/a	n/a
Asphaltic Coating (Dip Coating)	n/a	n/a	n/a	1.32	n/a	n/a
Scrap Preheater B (Preheater B)	2.25	0.01	1.29	0.04	1.08	n/a
EIFs B (Furnace System B)	3.00	n/a	n/a	0.36	1.69	n/a
Sand Handling B (Sand Proc.)	9.31	n/a	n/a	14.45	49.80	n/a
Charge Handling A (Scrap Cleaning)	1.53	n/a	n/a	n/a	n/a	n/a
Charge Handling B	0.84	n/a	n/a	n/a	n/a	n/a
Wood Shop (Pattern Shop)	Negligible	n/a	n/a	n/a	n/a	n/a
No Bake Core Making	0.25	n/a	n/a	0.47	n/a	n/a
TOTAL	**92.35**	**0.45**	**3.05**	**18.47**	**214.70**	**0.01**

5) Attainment Classification

The facility is located in an area classified as attainment for all criteria pollutants at the time of permit issuance.

6) Source Description

The facility covers approximately 52 acres, of which roughly half of it is used to sort, melt, mold, grind, and clean iron and steel for new iron castings. The active portion of the foundry includes Scrap Preheaters A and B, Furnaces A and B, Sand Handling systems, and Dust Collectors. A site plan is included as Attachment 2. A process flow diagram is included as Attachment 3.

Process	Process Name	Process Description
P1	Scrap Crushing	Scrap material is crushed to standardize size
P2	Scrap Tumbling	Scrap material is tumbled to remove dirt
P3	Scrap and Raw material preheating	Scrap iron is preheated in a natural gas fired preheater to bring materials up to temperature and to remove VOCs and moisture prior to scrap melting
P4	Melting and alloying	Scrap iron is melted in an induction furnace and if ductile iron is being made is alloyed with magnesium
P5	Pouring and cooling	Molten metal is poured into greensand molds
P6	Shakeout	Parts are removed from mold and separated from the sand castings; sand is separated from the parts and returned to the raw sand processing operation, cast parts are removed and transferred to the part finishing process
P7	Shot Blasting	Abrasive media is directed as high velocity at the rough unfinished part to create a uniform surface finish
P8	Grinding	Specific parts of the casting are ground to remove unwanted flashing and to meet final dimensional specifications
P9	Machining	Specific parts of the casting are removed using lathes, milling equipment and surface grinders to meet final dimensional specifications.
P10	Painting and Coating	A subset of all parts are painted or coated with an asphalt-based coating or are painted with a solvent borne coating to protect the metal against corrosion or to provide a uniform appearance
P11	Assembly, Packing, and Shipping	Parts may be assembled with subparts, are packed for shipping and are shipped
P12	Sand Unloading	Sand is transferred from trucks into enclose storage hoppers and tanks to be used for mold making
P13	Mulling and Mixing	Sand is mixed with clay, water, and binders to create “greensand” used for molding
P14	Molding	Molds are made for casting via transfer of greensand into the mold; no-bake cores are molds or mold inserts that are made with the addition of multi part binders that cure chemically
P15	Return Sand	Sand is taken from the shakeout equipment and is conveyed to either a waste sand container that will be landfilled or is returned to the sand-muller for reuse

7) Emission Units

Listed in Attachment 1 to Air Operating Permit.

8) Insignificant Emission Units

WAC 173-401-530: *Insignificant Emission Units* requires the following to be included in the AOP application.

a) WAC 173-401-530(1)(a): Emission units for which the actual emissions are less than the emission thresholds established in section WAC 173-401-530(4). *The permittee did not include any emission units in the AOP application.*

b) WAC 173-401-530(1)(d): Emission units or activities which generate only fugitive emissions as defined in WAC 173-400-030(31)[1]. *The submitted table in the AOP application is located as Attachment 4*

9) Permitting History

On October 12, 1990, D&L Foundry and Supply, Inc. submitted a Notice of Construction (NOC) application for construction and operation of a 5,355 ton per year gray and ductile iron foundry to the Grant County Clean Air Authority. The process described involves preheating iron scrap to remove moisture and foreign material, melting the scrap at 2000 plus degrees Fahrenheit in two induction furnaces, and then pouring the molten iron into sand molds (casting). After a brief cooling period the castings go through a shakeout process where the bulk of the sand mold is removed. The castings then are blasted free of sand and finished to customer specifications. The foundry proposed in 1990 consisted of six emission points, five of which were to be controlled using baghouses. Grant County Clean Air Authority issued an Approval Order (no docket number for the Order) for the plant on November 13, 1990. The legal description of the plant location is 300 feet east of Farm Unit 76 of irrigation Block 41, Columbia Basin Project, within the S.E. ¼ of Section 17, Township 19 N., Range 29 E. W.M., Wheeler Road, Moses Lake, Washington, in Grant County.

a) Order No. DE 94AQ-E108 was issued in response to a NOC application received from the permittee on September 9, 1993, again for the construction and operation of the foundry. This application included a proposed production level of 16,900 tons per year.

b) Order No. DE 94AQ-E108, First Amendment was issued on December 6, 1994, after an application was submitted with additional information on the baghouses, hood, and ducting for the furnaces. These items were different than what was installed under the original NOC Order DE 94AQ-E108. The first amendment to Order DE 94AQ-E108 was issued to cover these changes.

[1] Correct citation is WAC 173-401-030(38)

c) Order NO. DE 98AQ-E109 was issued on March 23, 1998, after D&L Foundry, Inc. submitted a NOC for the addition of two baghouses on an existing metal-casting production line in order to improve housekeeping.

d) Order No. DE 94AQ-E108, Second Amendment was issued on July 16, 2002, after the submittal of a NOC application for the installation of two new induction furnaces to replace two existing induction furnaces. The new induction furnaces have a melting capacity of 21,300 tons of gray and ductile iron each year. The installation caused changes to the existing emission control system.

e) Order No. DE 94AQ-E108, Third Amendment, was issued on August 12, 2003, after D&L Foundry and Supply, Inc. submitted two NOC applications. One application was for modifications to shot blast machine and dust collection system. One of two shot blast machines and associated dust collection equipment was removed and replaced with a new shot blast machine and dust collection equipment. The other application was for the installation of a new dust collection and bag filter system in the casting finishing room.

- On March 12, 2003, Ecology made a trip to D&L Foundry and Supply, Inc. to investigate a request to change a previous BACT determination on the use of a preheater to destroy VOC emissions from the scrap iron before the iron was charged into the new induction furnaces. The design of the hood system for intercepting vapors from the induction furnaces was found to be an adequate vapor control replacement for the preheaters. The previous BACT requirement was determined to be no longer necessary.
- During the trip on March 12, 2003, an experimental outdoor process for removing dirt from scrap iron was discovered. The process was not previously permitted. On June 5, 2003, D&L Foundry and Supply, Inc. submitted two NOC applications. One of the applications was for the scrap cleaning process. The other application is for a dust collection system to the existing pattern shop.

f) Order No. 06AQ-E170 was issued on August 14, 2006 after D&L Foundry submitted a request to increase the facility production limit from 21,300 tons of gray and ductile iron to 30,000 tons per year. Further information submitted indicated that D&L Foundry and Supply, Inc. planned to increase production by increasing hours of operation only: there is no new equipment proposed at this time. Also at this time, Ecology agreed to consolidate the many amendments and orders under which D&L Foundry and Supply, Inc. has been operating.

The order was written to include the additional information received on September 1, 2005, and to replace and rescind Order No. DE 94AQ-E108 and all the associated amendments (First, Second and Third), and Order No. DE 98AQ-E109. The previous Orders and Amendments are superseded with the Final Order of Approval No. 06AQ-E170.

g) Order No. 10AQ-E387 was issued on December 29, 2010 after D&L Foundry submitted a NOC application to add a new furnace building to its facility in Moses Lake, Washington. After construction, the foundry will consist of two buildings where melting will take place, both with scrap heaters, induction melting furnaces, sand preparation and handling, casting, and shot peening operations. The existing building contains a melt system that consists of three furnaces and two power supplies. One furnace and power supply is uncontrolled and is used on a limited basis. Two of the existing furnaces are controlled by a baghouse and share a power supply that limits them to operation one at a time. The two new furnaces also will operate only one at a time, although they may operate simultaneously with the existing furnaces. The facility has requested that the current production limit of 30,000 tons melted per year not be increased with this permitting action.

   Emission data provided with the application for the new furnaces indicates that at the 30,000 ton melt limit, D&L will emit more than 90 tons of CO per year. This emission rate will be reflected in facility permit status of a synthetic minor source with potential emissions greater than 80 percent of the Air Operating Permit threshold (100 tons per year).

h) Order No. 11AQ-E391 was issued February 17, 2011 to update the 2010 Synthetic Minor permit with a few minor changes. Permit 10AQ-E387 was rescinded and replaced.

i) Order No. 11AQ-E439 was issued on November 29, 2011. In February of 2011, D&L Foundry and Supply, Inc. was issued Approval Order No. 11AQ-E391 to add a new furnace building to its facility at 12970 Road 3 NE, in Moses Lake, Washington. In November of 2011, having determined the Throughblast baghouse in Building A was not operating in compliance, D&L submitted an application to install the body and filter from the baghouse intended for the new furnaces in place of the Torrit filter on the Throughblast. The approval order is rewritten to allow this change to be implemented.

j) Order No. 12AQ-E452 was issued on March 27, 2012. In March of 2012, D&L Foundry notified Ecology that it was approaching the limit on No-Bake Cores production contained in the latest facility approval order (No. 11AQ-E439) of 1000 tons in any 12 month period. D&L Foundry submitted an NOC application to increase this limit by 1000 tons and then revised their request to 750 tons per year to avoid NSR (the project emission increase will be approximately 0.49 tons per year of PM 2.5 at 750 tons increased production).

k) Order No. 14AQ-E584 was issued on June 2, 2015. On October 4, 2014, D&L Foundry submitted a NOC application and associated fee to increase production of the following:

   - Gray and ductile iron melt rate from 30,000 to 40,000 tons per 12 months.
   - Ductile iron melt rate from 3,000 to 4,000 tons per 12 months.
   - Greensand handled from 255,000 to 340,000 tons per 12 months.

- No-bake cores produced from 1,750 to 2,333 tons per 12 months.
- Add an on-site spray coating process.

The facility provided a new estimate of carbon monoxide emissions from an EPA conducted source test at a facility with similar processes. With the new CO estimates the facility PTE is 83.9 tons per year at the casting limit of 40,000 tons per year. Source testing for CO will be required in this approval order to ensure that the new CO estimates do not underestimate emissions at this site. The application was determined complete on June 1, 2015 and no comments were received during the 15 day web notification.

l) Order No. 18AQ-E008 was issued on May 24, 2018. On December 12, 2017, D&L Foundry submitted a NOC application and associated fee to increase production of the following:

- Gray and ductile iron melt rate from 40,000 to 50,000 tons per 12 months.
- Ductile iron melt rate from 4,000 to 6,000 tons per 12 months.
- Greensand handled from 340,000 to 483,825 tons per 12 months.
- No-bake cores produced from 2,333 to 2,917 tons per 12 months.

After two carbon monoxide (CO) source testing campaigns, D&L Foundry requested to increase their carbon monoxide limits for the site. With the proposed CO limit increases, D&L Foundry triggered Title V at 40,000 ton per year gray and ductile iron melt. To increase flexibility and allow for future growth D&L Foundry requested an increase in production and submitted an AOP application.

A BACT cost evaluation for CO and VOC emissions increases showed that additional control technology would not be economically feasible. Modeling was provided for the additional increase in CO emissions from these changes and demonstrated that impacts would be approximately two percent of the ASIL and NAAQS (527 $\mu g/m^3$ – max 1hr impact; 215 $\mu g/m^3$ – max 8hr impact).

For the increases of Benzene and Cadmium, the analysis provided for tBACT and modeling was reused as the incremental increases are the same as with the last production increase in 2014.

m) Order No. 19AQ-E069 was issued on November 19, 2019. On September 17, 2019, D&L Foundry submitted a NOC application and fee for the new (used equipment) Baghouse needed to replace a previously failed unit (catastrophic failure of the Ultra Jet) earlier in the year. The new Baghouse (Penticton) will not directly replace the failed unit because an existing Baghouse (TLROD) will be plumbed to take on the duties of the failed unit (Ultra Jet). The new Baghouse will be installed to take over the duties of the existing baghouse.

Previous Equipment Layout

Location	Manufacturer	Model	Cloth Area	Rated CFM
Preheater A	Wheelabrator	72 Ultra Jet	1058	4500
Furnace A	Fabric Filer Air System	196 – 10 TLROD	3807	12000

Proposed Equipment Layout

Location	Manufacturer	Model	Cloth Area	Rated CFM
Preheater A	Fabric Filer Air System	196-10 TLROD	3807	12000
Furnace A	D&L Foundry	Penticton 6-14-24K	4924	24000

The new equipment is expected to reduce PM emission as the Penticton has a higher Air to Cloth ratio compared to the outgoing equipment (Ultra Jet). Further, the new unit has improved grain loading for $PM_{2.5}$ of 0.0000582 gr/dscf compared the 0.0024 gr/dscf of the Ultra Jet.

The new Penticton baghouse will meet BACT as the manufacturer testing sheets show that the grain loading is better than the standard 0.005 gr/dscf.

There will be no increase of emissions as the emission generating equipment is not changing. However, there may be a reduction in the release of emissions from the Baghouse as the new unit will be an improvement over the existing system. It is estimated that the new Baghouse will reduce PM emissions by 0.53 tons/year over the previous estimation of the facility PTE for PM.

n) Order No. 20AQ-E042 was issued on August 19, 2020. On June 23, 2020, D&L Foundry submitted a NOC application and fee for the new dust collector that is expected to reduce up to 25 percent of the load from the existing baghouse. D&L Foundry does not plan to increase melt production, therefore the emissions from the new dust collector will not be an increase for the facility. The new dust collector (Donaldson Torit Model DFO 2-12 Serial number 17961) will be installed to mainly receive the dust generated during the grinding/cleaning process in the automated “Maus” equipment. In addition to the load reduction on the existing baghouse, the new dust collector will maintain a 0.004 gr/dscf rating which is an improvement over the existing baghouse. With the efficiency increase, the overall emissions from the facility will not be higher than current values, and it is likely a decrease in emissions.

Location	Manufacturer	Model	Cloth Area	Rated CFM
Maus	Donaldson Torit	DFO2-12	190 ft², each	6000

The dust collector will hold 12 cartridge filters, with a total filter area of 2,280 ft². The system includes an automatic pulse-jet cleaning system with a differential pressure gauge and sequencing timer board in an enclosure. The estimated emission rate is 0.142 lbs/hr of particulate matter, which is based on removing 25 percent of the load from the existing baghouse.

The new Donaldson Torit dust collector will meet BACT as the manufacturer testing sheets show that the grain loading is better than the standard 0.005 gr/dscf.

o) Order No. 24AQ-E009 was issued on July 29, 2024. On July 11, 2023, D&L Foundry submitted a NOC application and fee to update their Approval Order for the installation and operation of two new pulse jet-style dust collectors to replace four aging shaker-style dust collectors, installing a second exhaust stack to Plant A to replace the unpermitted exterior wall fans, and update the CO emission rate for the facility. [Below, old equipment (top) vs new equipment (bottom)]

Process Equipment	Manufacturer/Model	Capacity	Pollution Control Device and Manufacturer	Model
Sand No.1	Green Sand Storage, Transfer	50 Ton/Hour	Baghouse-Industrial Clean Air	1-7800
Sand No.2	Casting Shakeout Sand Transfer	50 Ton/Hour	Baghouse-Industrial Clean Air	16-800
Sand No.3	Casting Pouring	50 Ton/Hour	Baghouse-Industrial Clean Air	10-800

Process Equipment	Manufacturer / Model	Capacity	Pollution Control device and Manufacturer	Model
Sand No. 1 and No. 2	Green Sand Storage and transfer; Casting Shakeout and Sand Transfer	45,000 CFM; Pulse Jet	Baghouse – Fabric Filters Northwest	630-10
P and C Exhaust Stack No. 2	Custom Built, 60ft tall, 48” dia.	60,000 CFM	None	n/a

Process Equipment	Manufacturer / Model	Capacity	Pollution Control device and Manufacturer	Model
Sand No. 3 and Cast Cleaning, Grind	Casting Pouring; Main Building	40,000 CFM; Pulse Jet	Baghouse – Fuller Company, Modified by D&L Foundry	CS40000

During an inspection in early 2023, it was discovered that there were unpermitted exhaust fans on the west side of building A, venting to the outside without controls or ducting to reduce emissions from those fans. D&L explained that the purpose of the fans was to remove the hot air from pouring floor for worker safety and comfort. D&L was advised that fans like these must be ducted in a way to control the air emissions that are free venting from the building. Enclosing the wall fans to be routed to the exhaust stack for the A-side building was included in the NOC application for the new baghouses and CO emission rate update.

The updated CO emission allows for a cumulative rate for the facility, rather than individual rates. The rate went from 29.37 lb/hr for the A-side pouring and cooling exhaust stack, 5.05 lb/hr for the A-side shakeout baghouse, 1.60 lb/hr for the A-side pouring and cooling baghouse, and 11.37 lb/hr for the B-side sand processing baghouse (which totals 47.39 lb/hr) up to 48.95 lb/hr for the whole facility. Individual equipment will still be monitored and tested, but the facility is not permitted to exceed the cumulative rate for CO emissions.

10) Operational Flexibility

WAC 173-401-650 applies to "reasonably anticipated operating scenarios identified by the source in its application". The permittee did not identify any reasonably anticipated operating scenarios in the AOP application.

11) Permit Shield

a) Requirements to which the permit shield is granted are listed in Section 7 of the AOP.

b) The following requirements were listed as applicable but have been found by Ecology to be inapplicable.

(1) WAC 173-400-040(3)(b), Emission units identified as significant contributors to nonattainment status. The facility is not in a nonattainment area.

c) The following requirements were listed by the permittee as inapplicable in the AOP application:

(1) WAC 173-490, Emitting VOCs. This regulation is not applicable as Grant County is currently classified as Attainment.

(2) 40 CFR 82 Subpart B, Ozone Protection. D&L Foundry does not service motor vehicle air conditioners (identified because D&L Foundry recycles automotive parts for future iron castings).

(3) 40 CFR 63 Subpart EEEEE, NESHAPs for Iron and Steel Foundries. D&L is not a major source for HAPs.

12) Initial or One-Time Requirements

The following requirements are not included in the AOP as ongoing requirements.

a) Order No. DE 94AQ-E108, Condition 8; required D&L Foundry to submit consumption and type of Natural Gas used at facility by January 30 of each year.

b) Order No. DE 94AQ-E108, Condition 9.1; permit would become void if facility discontinued operations for a period greater than 18 months.

c) Order No. DE 94AQ-E108, Condition 9.5; required D&L Foundry to notify Ecology of any modification made to permitted equipment within 60 days of modification.

d) Order No. DE 98AQ-E109, Condition 5.1; required D&L Foundry to notify Ecology of the initial startup of recently permitted baghouses within 15 days of startup.

e) Order No. DE 98AQ-E108, Condition 5.2; required D&L Foundry to notify Ecology upon having completed assembling the O&M manual, within 90 days of completion.

f) Order No. 10AQ-E387, Condition 3; required D&L Foundry to perform a source test on the existing furnace building within 180 days of permit issuance. Additionally, required D&L Foundry to perform a source test on the new furnace building within 180 days of startup.

g) Order No. 14AQ-E584, Condition 8.2; required D&L Foundry to submit annual report grey and ductile iron produced, no-bake cores produced, and greensand handled all within 30 days of end of each calendar year.

h) Order No. 14AQ-E584, Condition 8.3; required D&L Foundry to submit an emission inventory for all annual emissions within 30 days of end of each calendar year.

i) Order No. 24AQ-E009, Condition 2(d); required D&L Foundry to perform initial performance testing of the Fabric Filter Northwest and Fuller Company (modified by D&L Foundry) baghouses must be conducted within 180 days of commissioning equipment.

13) Clarifications

No clarifications are currently needed for issuance of this AOP.

14) Streamlining

No applicable requirements underwent streamlining for purposes of this AOP.

15) Enforceability

Unless specifically designated otherwise, all terms and conditions of the Air Operating Permit, including any provisions designed to limit the source's potential to emit, are enforceable by EPA, and citizens, under the Federal Clean Air Act.

Those terms and conditions which are designated as state-only enforceable (S); are not included in the current State Implementation Plan (SIP) and are enforceable only by Ecology. All terms and conditions of the Air Operating Permit are enforceable by Ecology.

For permit conditions that have been included in the SIP, two dates are given. The first date is the date for the regulation that was adopted into the SIP. The second date is for the current version of the regulation. If a regulation is cited with no reference to enforceability, it is federally enforceable. For example, Standard Condition 2.10.2.4.2 is followed by the notation "[WAC 173-400-107(3), August 20, 1993, September 6, 2007 (S)]". In this case, the August 20, 1993 version of WAC 173-400-107(3) is included in the SIP and is federally enforceable. The September 6, 2007 version of WAC 173-400-107(3) is State-only enforceable.

16) Gap-Filling

Where an applicable requirement does not include sufficient monitoring, recordkeeping and reporting to satisfy WAC 173-401-615(1) and (2), the permit will establish adequate monitoring, recordkeeping and reporting. This is known as gap-filling. Applicable requirements for which gap-filling is proposed can be identified by the note following the MRRR citation, indicating that at least a portion of the MRRR is from gap-filling.

17) Public Participation

There were no comments received during the 30-day public comment period.

18) Monitoring, Recordkeeping and Reporting Requirement Sufficiency

No Additional Monitoring: The permittee must certify compliance with these conditions annually. Certification requires a reasonable inquiry to determine if the requirement was met during the reporting period.

a) MRRR 1M: The MRRR details the procedures to be taken for visible emissions. Periodic walk-around surveys are a simple and direct method of detecting the presence of fugitive emissions. The presence of visible emissions is an indication that reasonable precautions to prevent release of air contaminants or to prevent fugitive dust from becoming airborne are not being taken. No emission standards apply to fugitive

emissions or fugitive dust, so a presence/absence determination is acceptable monitoring.

b) MRRR 2M: This MRRR was designed to ensure that complaints from the public are recognized, investigated and any appropriate corrective action taken. Recordkeeping provides documentation of all complaints and the facility response to each.

c) MRRR 3M: O&M Manuals include manufacturer's recommendations for equipment operation, maintenance and inspection schedules and requirements for response to upset conditions. Operation in accordance with O&M Manuals is considered to constitute good air pollution control practice.

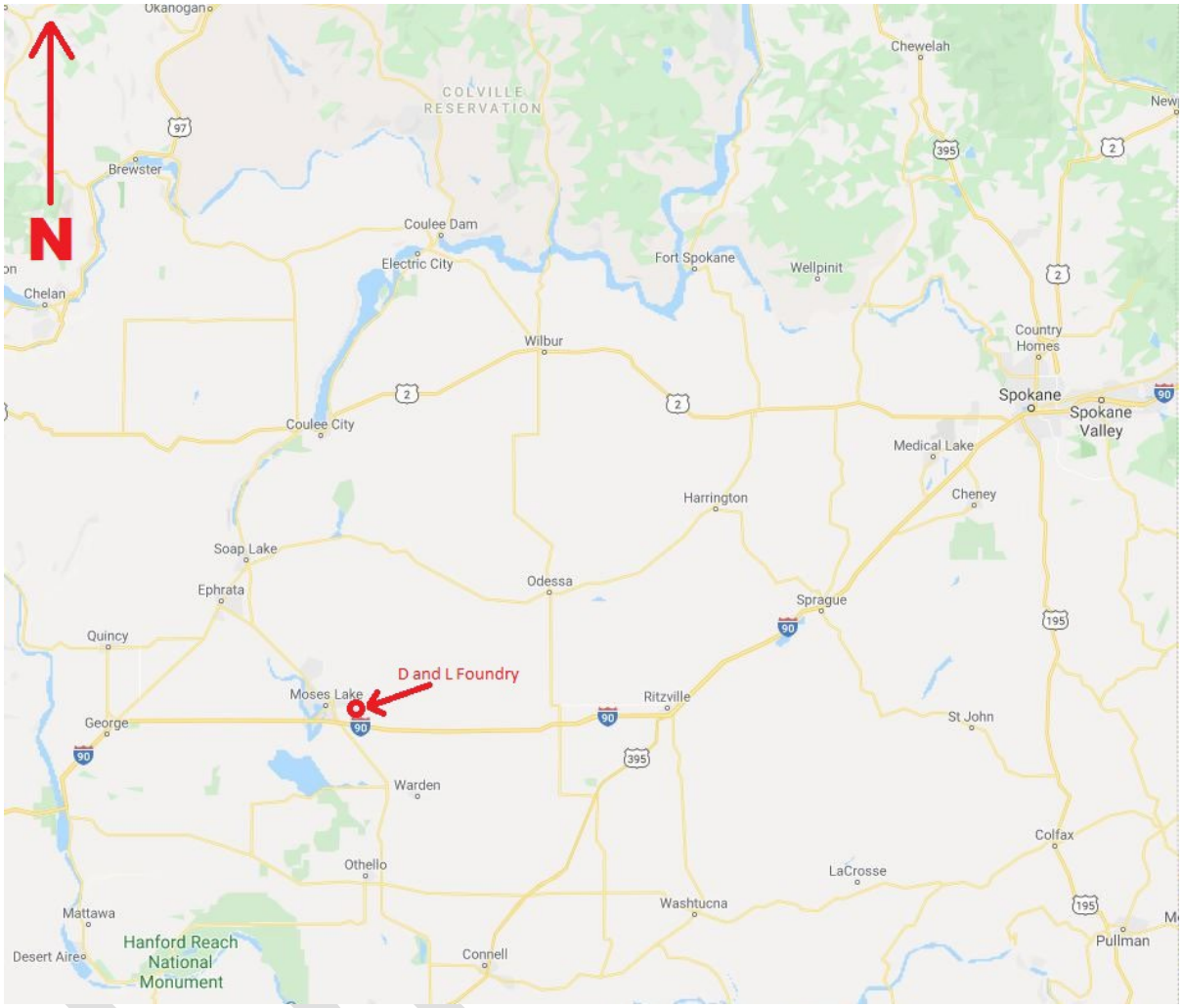
d) MRRR 4M: Incorporates a control plan for minimizing contaminants from entering the preheaters.

e) MRRR 5M: Includes testing methods, number of test runs, and submittal instructions for Particulate Matter testing. This includes EPA Method 5 and 202.

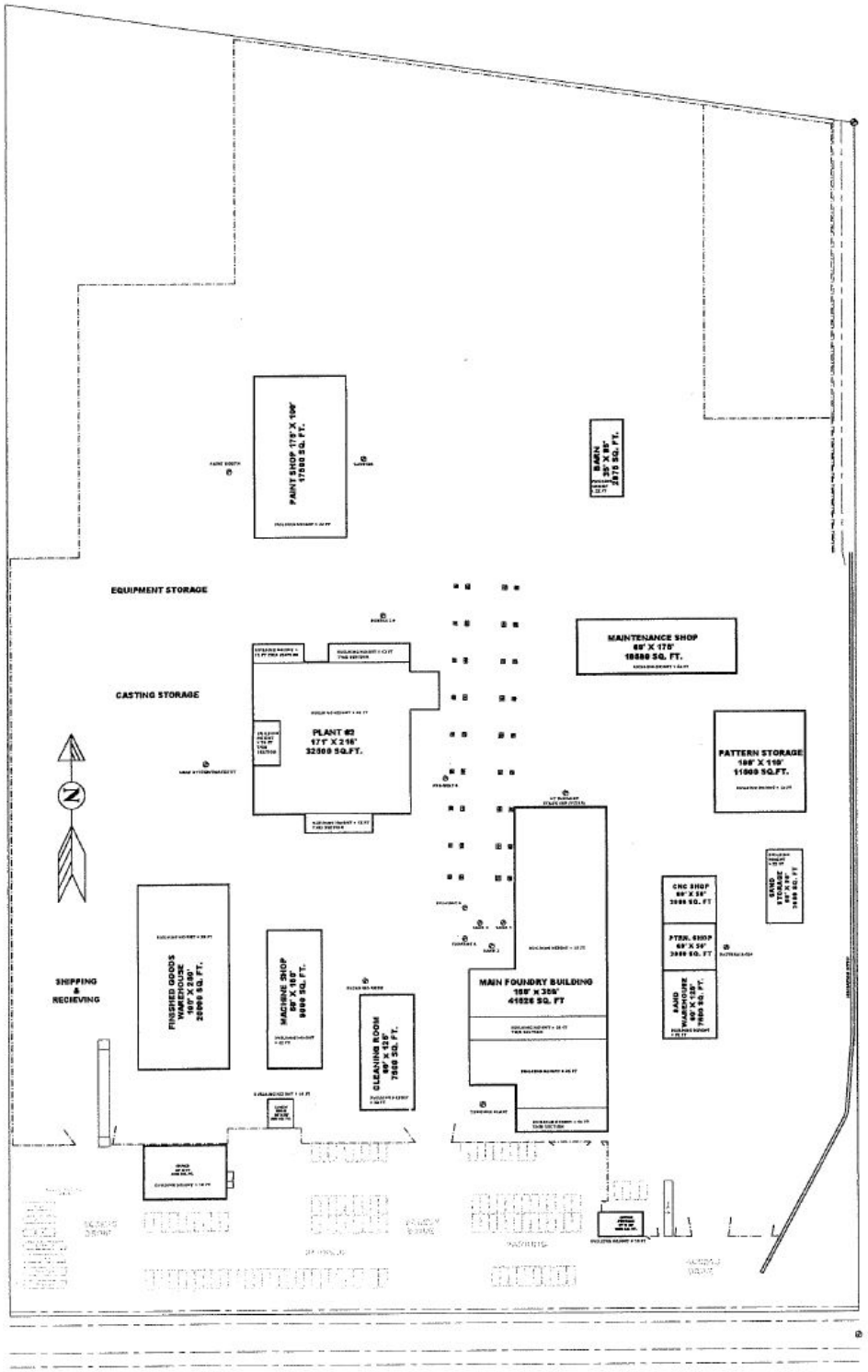
f) MRRR 6M: Incorporates testing for Carbon Monoxide from significant emissions units identified in the NOC approval (Order No. 19AQ-E069) using the approved methods. Additional procedures are outlined including number of test runs and frequency, as well as submittal requirements.

g) MRRR 7M: This MRRR outlines the recordkeeping for the facility. This includes frequency and quantities as well as duration of record retention. Submittal frequency to the administrator is also included.

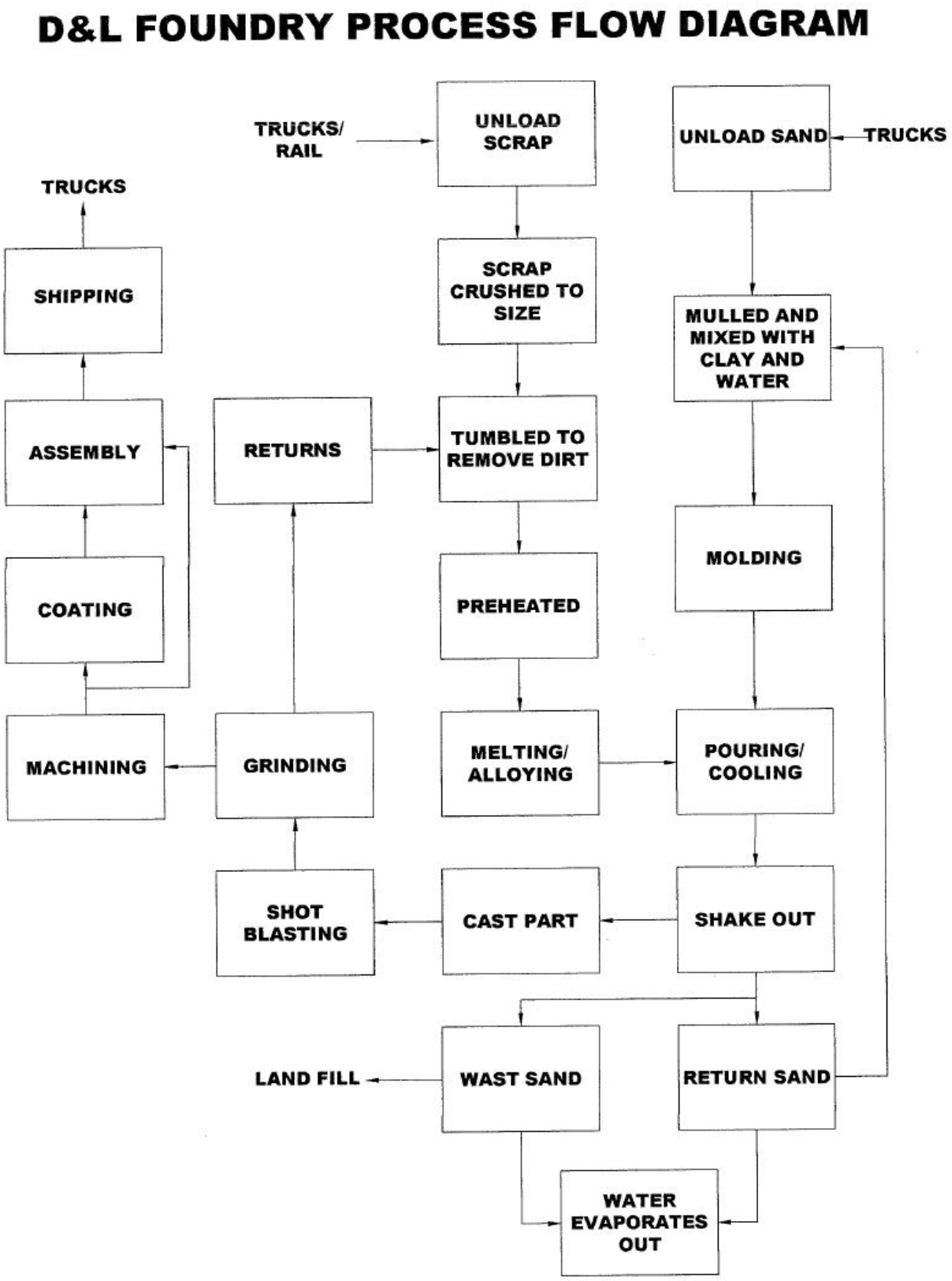
Attachment 1: Location Map



Attachment 2: Site Plan



Attachment 3: Flow Diagram



Attachment 4: Insignificant Emissions

Emission Unit Description	Basis / Justification for IEU Designation
Asphalt Coating Tank	WAC 173-401-533 (x),(y)
Laboratory Operations	WAC 173-401-532(51) & (73)
Mill lubricants and hydraulic fluid reservoirs and pumping equipment	WAC 173-401-532(3) & (4)
Maintenance gases	WAC 173-401-532(5)
Maintenance & repair	WAC 173-401-532(5), (12), (33), (45), (55), & (74)
Dumpsters	WAC 173-401-532(6) & (79)
Repair & maintenance shop vehicle exhaust	WAC 173-401-532(7)
Foundry vents from rooms, buildings and enclosures that contain permitted emission units or activities	WAC 173-401-532(9)
Building exhaust vents	WAC 173-401-532(9)
Building openings (doors, windows, etc.)	WAC 173-401-532(9)
Foundry fork lifts & trucks	WAC 173-401-532(10)
Cutting torches	WAC 173-401-532(12)
Sweeping, vacuuming, and mopping activities	WAC 173-401-532(32) & (35)
Portable drums & totes	WAC 173-401-532(42)
Lawn & landscape activities	WAC 173-401-532(43)
Vehicle maintenance	WAC 173-401-532(45) & (77)
Plant air conditioning & refrigerators	WAC 173-401-532(46)
Mill bathrooms & showers	WAC 173-401-532(48) & (50)
Mill office activities	WAC 173-401-532(49)
Fire training & fire fighting equipment	WAC 173-401-532(52)
Woodworking	WAC 173-401-532(55)
Machining, cutting and turning operations	WAC 173-401-532(55)
Batteries & battery chargers	WAC 173-401-532(77)
Air compressors, pneumatically operated equipment, & hand tools	WAC 173-401-532(88)
Gasoline storage tank	WAC 173-401-533 (2)(c)
Diesel Fuel storage tank	WAC 173-401-533 (2)(c)
LPG tank, 1000 gallon	WAC 173-401-533 (2)(d)
Water cooling towers, (2)	WAC 173-401-533(2)(m)
Welding operations – average welding rod usage less than threshold of 1 ton/day	WAC 173-401-533(2)(i)