



ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY CLASS I PERMIT

COMPANY: *Snowflake White Mountain Power, LLC*
FACILITY: *Snowflake White Mountain Power*
PERMIT #: *36183*
DATE ISSUED: **DRAFT**
EXPIRY DATE:

SUMMARY

This Class I Air Quality Control Permit is issued to Snowflake White Mountain Power, the Permittee, for the construction and operation of an electric generating facility in Snowflake, Navajo County, Arizona.

The generating facility is to be fueled by paper fiber from the Abitibi paper recycling mill and waste wood and bark from nearby forest salvage operations. The plant will have a nominal capacity of 22 Megawatts (MW), and will consist of an approximate 340 Million British thermal unit (MMBtu) boiler, steam turbine unit, a cooling tower, and wood handling equipment. The fuel is fired in the boiler to produce steam. The steam from the boiler will operate the steam turbine, producing electricity. The spent steam from the turbine is then delivered to condensers to condense the steam back to water for reuse in the boiler. Water from the cooling towers is used to condense the steam in the condenser.

The boiler stack is the primary sources of air pollutant emissions. The primary pollutants in the stack emissions are carbon monoxide (CO), nitrogen oxides (NO_x), and sulfur dioxide (SO₂) which result from the combustion of the wood. Other pollutants present in the emissions are particulate matter (PM), volatile organic compounds (VOC), and hazardous air pollutants (HAPs).

This permit is issued in accordance with Title 49, Chapter 3 of the Arizona Revised Statutes. All definitions, terms, and conditions used in this permit conform to those in the Arizona Administrative Code (A.A.C) R18-2-101 et. Seq., except as otherwise defined in this permit.

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ATTACHMENT "A": GENERAL PROVISIONS

Air Quality Control Permit No. 36183 For *Snowflake White Mountain Power, LLC*

I. PERMIT EXPIRATION AND RENEWAL [ARS § 49-426.F, A.A.C. R18-2-304.C.2, and -306.A.1]

- A. This permit is valid for a period of five years from the date of issuance.
- B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months, prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS [A.A.C. R18-2-306.A.8.a and b]

- A. The Permittee shall comply with all conditions of this permit including all applicable requirements of the Arizona air quality statutes and air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE

[A.A.C. R18-2-306.A.8.c, -321.A.1, and -321.A.2]

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- B. The permit shall be reopened and revised under any of the following circumstances
 - 1. Additional applicable requirements under the Clean Air Act become applicable to the Class I source. Such a reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless an application for renewal has been submitted pursuant to A.A.C. R18-2-322.B. Any permit revision required pursuant to this subparagraph shall comply with the provisions in A.A.C. R18-2-322 for permit renewal and shall reset the five-year permit term.
 - 2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by

the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.

3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.

C. Proceedings to reopen and reissue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under Condition III.B.1 above, affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Condition III.B.1 above shall not result in a resetting of the five-year permit term.

IV. POSTING OF PERMIT

[A.A.C. R18-2-315]

- A. The Permittee shall post this permit or a certificate of permit issuance where the facility is located in such a manner as to be clearly visible and accessible. All equipment covered by this permit shall be clearly marked with one of the following:
1. Current permit number; or
 2. Serial number or other equipment ID number that is also listed in the permit to identify that piece of equipment.
- B. A copy of the complete permit shall be kept on site.

V. FEE PAYMENT

[A.A.C. R18-2-306.A.9 and -326]

The Permittee shall pay fees to the Director pursuant to ARS § 49-426(E) and A.A.C. R18-2-326.

VI. ANNUAL EMISSION INVENTORY QUESTIONNAIRE

[A.A.C. R18-2-327.A and B]

- A. The Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31st or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.
- B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

VII. COMPLIANCE CERTIFICATION

[A.A.C. R18-2-309.2.a, -309.2.c-d, and -309.5.d]

- A. The Permittee shall submit a compliance certification to the Director semiannually, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than May 15th, and shall report the compliance status of the source during the period between October 1st of the previous

year and March 31st of the current year. The second certification shall be submitted no later than November 15th, and shall report the compliance status of the source during the period between April 1st and September 30th of the current year.

The compliance certifications shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;
 2. Identification of the methods or other means used by the Permittee for determining the compliance status with each term and condition during the certification period,
 3. The status of compliance with the terms and conditions of this permit for the period covered by the certification, based on the methods or means designated in Condition VII.A.2 above. The certifications shall identify each deviation and take it into account for consideration in the compliance certification;
 4. For emission units subject to 40 CFR Part 64, the certification shall also identify as possible exceptions to compliance any period during which compliance is required and in which an excursion or exceedance defined under 40 CFR Part 64 occurred;
 5. All instances of deviations from permit requirements reported pursuant to Condition XII.B of this Attachment; and
 6. Other facts the Director may require to determine the compliance status of the source.
- B.** A copy of all compliance certifications shall also be submitted to the EPA Administrator.
- C.** If any outstanding compliance schedule exists, a progress report shall be submitted with the semi-annual compliance certifications required in Condition VII.A above.

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

[A.A.C. R18-2-304.H]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY

[A.A.C. R18-2-309.4]

Upon presentation of proper credentials, the Permittee shall allow the Director or the authorized representative of the Director to:

- A.** Enter upon the Permittee's premises where a source is located, emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;

- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

[A.A.C. R18-2-304.C]

If this source becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

XI. ACCIDENTAL RELEASE PROGRAM

[40 CFR Part 68]

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the time line specified in 40 CFR Part 68.

XII. EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCY REPORTING

A. Excess Emissions Reporting

[A.A.C. R18-2-310.01.A and -310.01.B]

1. Excess emissions shall be reported as follows:

a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:

(1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from Condition XII.A.1.b below.

(2) Detailed written notification by submission of an excess emissions report within 72 hours of the notification pursuant to Condition XII.A.1.a.(1) above.

b. The report shall contain the following information:

(1) Identity of each stack or other emission point where the excess emissions occurred;

- (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions;
- (3) Date, time and duration, or expected duration, of the excess emissions;
- (4) Identity of the equipment from which the excess emissions emanated;
- (5) Nature and cause of such emissions;
- (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions; and
- (7) Steps taken to limit the excess emissions. If the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.

2. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period, or changes in the nature of the emissions as originally reported, shall require additional notification pursuant to Condition XII.A.1 above.

[A.A.C. R18-2-310.01.C]

B. Permit Deviations Reporting

[A.A.C. R18-2-306.A.5.b]

The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to an emergency or within two working days of the time when the owner or operator first learned of the occurrence of a deviation from a permit requirement.

C. Emergency Provision

[A.A.C. R18-2-306.E]

1. An "emergency" means any situation arising from sudden and reasonable unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly

designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if Condition XII.C.3 is met.
3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was being properly operated at the time;
 - c. During the period of the emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - d. The Permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

D. Compliance Schedule

[ARS § 49-426.1.5]

For any excess emission or permit deviation that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

E. Affirmative Defenses for Excess Emissions Due to Malfunctions, Startup, and Shutdown

[A.A.C. R18-2-310]

1. Applicability

This rule establishes affirmative defenses for certain emissions in excess of an emission standard or limitation and applies to all emission standards or limitations except for standards or limitations:

- a. Promulgated pursuant to Sections 111 or 112 of the Act;

- b. Promulgated pursuant to Titles IV or VI of the Clean Air Act;
- c. Contained in any Prevention of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the U.S. EPA;
- d. Contained in A.A.C. R18-2-715.F; or
- e. Included in a permit to meet the requirements of A.A.C. R18-2-406.A.5.

2. Affirmative Defense for Malfunctions

Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. When emissions in excess of an applicable emission limitation are due to a malfunction, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:

- a. The excess emissions resulted from a sudden and unavoidable breakdown of process equipment or air pollution control equipment beyond the reasonable control of the Permittee;
- b. The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
- c. If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, the Permittee satisfactorily demonstrated that the measures were impracticable;
- d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
- e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
- f. The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
- g. During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;

- h. The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
- i. All emissions monitoring systems were kept in operation if at all practicable; and
- j. The Permittee's actions in response to the excess emissions were documented by contemporaneous records

3. Affirmative Defense for Startup and Shutdown

- a. Except as provided in Condition XII.E.3.b below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. When emissions in excess of an applicable emission limitation are due to startup and shutdown, the Permittee has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the Permittee has complied with the reporting requirements of A.A.C. R18-2-310.01 and has demonstrated all of the following:
 - (1) The excess emissions could not have been prevented through careful and prudent planning and design;
 - (2) If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
 - (3) The air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - (4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
 - (5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - (6) During the period of excess emissions there were no exceedances of the relevant ambient air quality standards established in Title 18, Chapter 2, Article 2 of the Arizona Administrative Code that could be attributed to the emitting source;
 - (7) All emissions monitoring systems were kept in operation if at all practicable; and

(8) Contemporaneous records documented the Permittee's actions in response to the excess emissions.

b. If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to Condition XII.E.2 above.

4. Affirmative Defense for Malfunctions during Scheduled Maintenance

If excess emissions occur due to a malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to Condition XII.E.2 above.

5. Demonstration of Reasonable and Practicable Measures

For an affirmative defense under Condition XII.E.2 or XII.E.3 above, the Permittee shall demonstrate, through submission of the data and information required by Condition XII.E and A.A.C. R18-2-310.01, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of the excess emissions.

XIII. RECORD KEEPING REQUIREMENTS

[A.A.C. R18-2-306.A.4]

A. The Permittee shall keep records of all required monitoring information including, but not limited to, the following:

1. The date, place as defined in the permit, and time of sampling or measurements;
2. The date(s) analyses were performed;
3. The name of the company or entity that performed the analyses;
4. A description of the analytical techniques or methods used;
5. The results of such analyses; and
6. The operating conditions as existing at the time of sampling or measurement.

B. The Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

C. All required records shall be maintained either in an unchangeable electronic format or in a handwritten logbook utilizing indelible ink.

XIV. REPORTING REQUIREMENTS

[A.A.C. R18-2-306.A.5.a]

The Permittee shall submit the following reports:

- A. Compliance certifications in accordance with Section VII of Attachment “A”.
- B. Excess emission; permit deviation, and emergency reports in accordance with Section XII of Attachment “A”.
- C. Other reports required by any condition of Attachment “B”.

XV. DUTY TO PROVIDE INFORMATION

[A.A.C. R18-2-304.G and -306.A.8.e]

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- B. If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

XVI. PERMIT AMENDMENT OR REVISION

[A.A.C. R18-2-318, -319, and -320]

The Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVII, as follows:

- A. Administrative Permit Amendment (A.A.C. R18-2-318);
- B. Minor Permit Revision (A.A.C. R18-2-319); and
- C. Significant Permit Revision (A.A.C. R18-2-320)

The applicability and requirements for such action are defined in the above referenced regulations.

XVII. FACILITY CHANGE WITHOUT A PERMIT REVISION

[A.A.C. R18-2-306.A.4 and -317]

- A. The Permittee may make changes at the permitted source without a permit revision if all of the following apply:
 - 1. The changes are not modifications under any provision of Title I of the Act or under ARS § 49-401.01(19);
 - 2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions;
 - 3. The changes do not violate any applicable requirements or trigger any additional applicable requirements;

4. The changes satisfy all requirements for a minor permit revision under A.A.C. R18-2-319.A; and
 5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.
- B.** The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of Conditions XVII.A and XVII.C of this Attachment.
- C.** For each change under Conditions XVII.A and XVII.B above, a written notice by certified mail or hand delivery shall be received by the Director and the Administrator a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change, but must be provided as far in advance of the change, as possible or, if advance notification is not practicable, as soon after the change as possible.
- D. Each notification shall include:**
1. When the proposed change will occur;
 2. A description of the change;
 3. Any change in emissions of regulated air pollutants; and
 4. Any permit term or condition that is no longer applicable as a result of the change.
- E.** The permit shield described in A.A.C. R18-2-325 shall not apply to any change made under this Section, other than implementation of an alternate to Conditions XVII.A and XVII.B above.
- F.** Except as otherwise provided for in the permit, making a change from one alternative operating scenario to another as provided under A.A.C. R18-2-306.A.11 shall not require any prior notice under this Section.
- G.** Notwithstanding any other part of this Section, the Director may require a permit to be revised for any change that, when considered together with any other changes submitted by the same source under this Section over the term of the permit, do not satisfy Condition XVII.A above.

XVIII. TESTING REQUIREMENTS

[A.A.C. R18-2-312]

- A.** The Permittee shall conduct performance tests as specified in the permit and at such other times as may be required by the Director.

B. Operational Conditions During Testing

Tests shall be conducted during operation at the maximum possible capacity of each unit under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during periods of start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

C. Tests shall be conducted and data reduced in accordance with the test methods and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.

D. Test Plan

At least 14 calendar days prior to performing a test, the Permittee shall submit a test plan to the Director in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

1. Test duration;
2. Test location(s);
3. Test method(s); and
4. Source operation and other parameters that may affect test results.

E. Stack Sampling Facilities

The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platform(s);
3. Safe access to sampling platform(s); and
4. Utilities for sampling and testing equipment.

F. Interpretation of Final Results

Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs is required to be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the

Permittee's control, compliance may, upon the Director's approval, be determined using the arithmetic mean of the results of the other two runs. If the Director or the Director's designee is present, tests may only be stopped with the Director's or such designee's approval. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes: forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation, which demonstrates good cause, must be submitted.

G. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

XIX. PROPERTY RIGHTS

[A.A.C. R18-2-306.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

XX. SEVERABILITY CLAUSE

[A.A.C. R18-2-306.A.7]

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

XXI. PERMIT SHIELD

[A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements identified in the portions of this permit subtitled "Permit Shield". The permit shield shall not apply to minor revisions pursuant to Condition XVI.B of this Attachment and any facility changes without a permit revision pursuant to Section XVII of this Attachment.

XXII. PROTECTION OF STRATOSPHERIC OZONE

[40 CFR Part 82]

If this source becomes subject to the provisions of 40 CFR Part 82, then the Permittee shall comply with these provisions accordingly.

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ATTACHMENT "B": SPECIFIC CONDITIONS

Air Quality Control Permit No. 36183
For
Snowflake White Mountain Power, LLC

I. RELATIONSHIP OF PERMIT TO APPLICABLE STATE IMPLEMENTATION PLAN

[ARS § 49-404.c and -426]

This permit is issued pursuant to the provisions of the Arizona Revised Statutes (ARS) and constitutes an Installation Permit for the purpose of the applicable State Implementation Plan.

II. FACILITY WIDE REQUIREMENTS

A. Facility Wide Requirements

1. Within 180 days of initial startup, the Permittee shall have on site or on call a person that is certified in EPA Reference Method 9. [A.A.C. R18-2-306.A.3.c]
2. The Permittee shall operate and maintain all equipment according to manufacturer's specifications. [A.A.C. R18-2-306.A.2, -306.01, and 331.A.3.a]
[Material permit conditions are identified by underlines and italics]
3. The Permittee shall maintain a copy of the manufacturer's specifications for all equipment onsite. [A.A.C. R18-2-306.A.2]
4. The Permittee shall maintain and provide upon request by ADEQ staff, logs of all emission related maintenance activities performed on the emissions units. [A.A.C. R18-2-306.A.3.c]

B. Operational Limitations and Standards

1. Fuel Limitations [A.A.C. R18-2-306.01 and 331.A.3.a]
[Material permit conditions are identified by underlines and italics]
 - a. The Permittee shall not exceed a maximum heat input of 2,971,777 MMBtu, based on all fuels, for any consecutive twelve (12) month period.
 - b. Heating Values
 - i. The heating value of the wood waste fired in the boiler shall not be less than 5,850 Btu per pound based on a 12-month rolling total.
 - ii. The heating value of the fiber waste fired in the boiler shall not be less than 2,500 Btu per pound based on a 12-month rolling total.

c. Wood Waste

Except as provided in Conditions II.B.1.d and Condition II.B.1.e, the Permittee shall burn **only** un-processed wood waste in the boiler identified in Attachment "C". Un-processed wood means wood that has not been treated with any chemicals or additives.

d. Wood Fiber [A.A.C. R18-2-306.01 and 331.A.3.a]
[Material permit conditions are identified by underlines and italics]

i. *The Permittee shall not exceed a maximum heat input of 912,354 MMBtu, based on fiber waste firing, for any consecutive twelve (12) month period.*

ii. Except as provided in Conditions II.B.1.c and Condition II.B.1.e, the Permittee shall burn **only** paper fiber waste from the Abitibi paper mill plant in the boiler identified in Attachment "C".

e. Supplemental Fuel [A.A.C. R18-2-306.A.2]

The Permittee shall burn only natural gas as a supplemental fuel. The supplemental fuel may be used for startup or to keep the operating temperature at appropriate levels.

2. The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution. [A.A.C. R18-2-730.D]

C. Recordkeeping and Reporting Requirements [A.A.C. R18-2-306.A.3, -306.A.4]

1. The Permittee shall maintain daily records of total fuel (wood waste, fiber waste, and natural gas) combusted per day in units of tons or standard cubic feet, and MMBtu. The daily MMBtu records shall be calculated based on the amount of each fuel fired and the most recent twelve month average heating value for wood waste and fiber waste, and the on-site records of the heating value for natural gas.

2. At the end of each month, the Permittee shall calculate and record a twelve month rolling total of the total heat input of the boiler in MMBtu for the previous twelve months, considering all fuels fired in the boiler. The twelve month average shall be calculated using the most recent twelve month average heating value for wood waste and fiber waste, and the on-site records of the heating value for natural gas.

3. At the end of each month, the Permittee shall calculate and record a twelve month rolling total of the heat input of the boiler in MMBtu for the previous twelve months for fiber waste fuel. The twelve month average shall be calculated using the most recent twelve month average heating value for the fiber waste.

4. After each performance test required in Condition II.D below, the Permittee shall calculate and record a twelve month rolling total of the heating value of the wood waste and fiber waste fired in the boiler. The calculated twelve month average shall be a weighted average based on the amount of fuel fired each month.
5. The Permittee shall maintain on-site records of the heating value of the natural gas fired in the boiler.
6. At the time the compliance certifications required by Section VII of Attachment "A" are submitted, the Permittee shall submit reports of all monitoring, recordkeeping, and testing activities required by Attachment "B" performed during the compliance term. [A.A.C. R18-2-306.A.5]

D. Performance Testing Requirements [A.A.C. R18-2-312.A]

The Permittee shall conduct monthly tests on the wood waste and fiber waste to determine their heating values. The heating values shall be determined using ASTM D2015-85 or equivalent.

E. Permit Shield [A.A.C. R18-2-325]

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-730.D

III. BOILER REQUIREMENTS

A. Stack Requirements [A.A.C. R18-2-306.A.2]

If the stack is equipped with a rain cap, it must be hinged.

B. Particulate Matter and Opacity

1. Emission Limitations/Standards [A.A.C. R18-2-703.B and 703.C.1]

a. Particulate Matter

- i.* The Permittee shall not allow or permit the emission of particulate matter in excess of the amount calculated by the following equation:

$$E = 1.02Q^{0.769}$$

Where:

- E = the maximum allowable particulate emissions rate in pounds-mass per hour
 Q = the heat input in million Btu per hour

- ii. For purposes of this Section, the heat input shall be the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet.
 - b. Opacity
 - i. Until April 23, 2006, the Permittee shall not cause, allow, or permit to be emitted into the atmosphere from the boiler stack, opacity which exceeds 40% as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B.2]
 - ii. After April 23, 2006, the Permittee shall not cause, allow, or permit to be emitted into the atmosphere from the boiler stack, opacity which exceeds 20% as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B.3]
 - iii. If the presence of uncombined water is the only reason for an exceedance of any visible emissions requirement in this Section, the exceedance shall not constitute a violation of the applicable opacity limit. [A.A.C. R18-2-702.C]
- 2. Air Pollution Control Equipment [A.A.C. R18-2-306.01 and -331.d and e]
 [Material Permit Conditions are indicated with underline and italics]
 - a. *The Permittee shall install, maintain, and operate a multiclone collector to control particulate matter emissions from the boiler exhaust.*
 - b. *The Permittee shall install, maintain, and operate a baghouse, in series with the multiclone collector, to control particulate matter emissions from the boiler exhaust.*
- 3. Monitoring, Recordkeeping, and Reporting Requirements [A.A.C. R18-2-306.A.3.c]
 - a. The Permittee shall conduct a monthly EPA Reference Method 9 observation of emissions emanating from the boiler stack. The Permittee shall keep a record of the name of the observer, date and time of observation, and the results of the observation. If the observation results in an exceedance of the opacity limit contained in Condition III.B.1.c, the Permittee shall take corrective action and log all such actions. Such exceedances shall be reported as excess emissions in accordance with Condition XII.A.1 of Attachment "A".
 - b. The Permittee shall maintain logs of all maintenance activities performed on the multicone collector and the baghouse. These logs shall be maintained on-site and shall be readily available to ADEQ representatives upon request.
 - c. Compliance Assurance Monitoring for Particulate Matter
 - i. *The Permittee shall install, maintain, and operate differential*

pressure transducers to measure the pressure drop across each module of the fabric filter and the entire fabric filter on a continuous basis (every 15 minutes) and shall record the output of the system.

[A.A.C. R18-2-306.A.3.c, 331.A.3.c and 40 CFR 64.6(c)(1)(i) and (ii)]
[Material Permit Conditions are indicated with underline and italics]

- ii. The Permittee shall operate the pressure drop monitoring system in accordance with manufactures specifications.
- iii. The pressure drop across each module of the fabric filter and across the entire fabric filter shall be an indicator of particulate matter emissions. [40 CFR 64.6(c)(1)(i)]
- iv. Pressure drops outside the range established in Condition III.B.4.d shall be considered an excursion. [40 CFR 64.6(c)(2)]
- v. The Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repair of the monitoring equipment. [40 CFR 64.6(c)(3), 64.7(b)]
- vi. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the boiler is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 64.6(c)(3), 64.9(c)]
- vii. Response to excursions [40 CFR 64.6(c)(3), 64.7(d)]
 - (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the boiler (including the control device and associated capture system) to their normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction, and taking any necessary corrective

actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operations to within the indicator range, designated condition, or below applicable emission limitation or standard, as applicable.

- (b) Determination of whether Permittee has used acceptable procedures in response to an excursion or exceedance will be based in information available, which may include but is not limited to, monitoring results, review of operation, and maintenance procedures and records, and inspection of the control device, associated capture system, and process.

viii. After approval of the monitoring under this Section, if the Permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the Department, and if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conduction monitoring and collecting data, or the monitoring of additional parameters. [40 CFR 64.6(c) (3), 64.9(e)]

iv. Excursions shall be reported as required by Condition VII.A.4 of Attachment "A" of this permit. The report shall include, at a minimum, the following: [A.A.C. R18-2-309(2)(c)(iii), 64.9(a)(2)]

- (a) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursion or exceedances, as applicable, and the corrective actions taken; and
- (b) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable).

4. Performance Testing Requirement [A.A.C. R18-2-312]

- a. Within 180 days after startup, and annually thereafter, the Permittee shall conduct performance tests for particulate matter emissions from the boiler stack.
- b. Additional performance tests for particulate matter emissions being emitted from the boiler stack shall be conducted as required by the Director.
- c. All performance testing for particulate matter shall be conducted in accordance with either EPA Reference Method 5 or 201A, and EPA Reference Method 202.
- d. During the annual performance test, the Permittee shall establish the indicator range to be used in Condition III.B.3.c.iv. The range shall be established by recording the pressure drop across each module and across the entire fabric filter during performance testing. The range shall be one standard deviation if the data variability is high or two standard deviations if the data variability is low.

5. Permit Shield [A.A.C. R18-2-325]

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-703.B, A.A.C. R18-2-703.C.1, A.A.C. R18-2-702.B.2, A.A.C. R18-2-702.B.3, and A.A.C. R18-2-702.C

C. Nitrogen Oxide (NO_x)

1. Emission Limitation/Standard [A.A.C. R18-2-306.A.2, -306.01, and -331.A.3.a]
[Material Permit Conditions are indicated with underline and italics]

The Permittee shall not cause to be discharged into the atmosphere from the boiler stack, including emissions generated during start-ups and shutdowns, NO_x emissions in excess of 240 tons per year on a 365 day rolling total.

2. Air Pollution Control [A.A.C. R18-2-306.A.2, -306.01.A, and -331.A.3.d and e]
[Material Permit Conditions are indicated with underline and italics]

The Permittee shall install, maintain, and operate a selective non-catalytic reduction system to control nitrogen oxide emissions from the boiler exhaust.

3. Monitoring, Recordkeeping, and Reporting Requirements

- a. *The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system (CMS), and record the output of the system, for measuring emissions of nitrogen oxides from the boiler stack.*

[A.A.C.R18-2-306.01, A.A.C.R18-2-331.A.3.c]
[Material permit condition is underlined and italicized]

- b. Continuous Monitoring Systems Requirements
[A.A.C.R18-2-306.01, A.A.C.R18-2-306.A.3.c and A.A.C.R18-2-312.H.3]
- i. The Permittee shall follow the monitoring procedures and performance specifications of 40 CFR 60, Appendix B and Appendix F.
 - ii. The Permittee shall maintain 95 percent data recovery on all the data obtained from the CEM. Compliance with this data recovery requirement shall be determined based on total operating time of the facility during a 365 day period.
 - iii. The CEMs shall be designed so that one cycle of operation is complete for each successive 15-minute period.
 - iv. All data gaps shall be filled with the average hourly NO_x concentration and volume recorded by the CEMs for the hour immediately before and the hour immediately after the missing data period.
 - v. Instrument span shall be such that the expected output is 50 to 70 percent of span.
- c. The Permittee shall maintain a 365-day rolling total of NO_x emissions from the boiler to demonstrate compliance with emission limitation set in Condition III.C.1 of this Attachment. [A.A.C.R18-2-306.01.A]
- d. The Permittee shall submit a quarterly report to include the following information:
- i. Rolling total of NO_x emissions on a 365 day basis in that quarterly period; and
 - ii. A monitoring systems performance report or a summary report form to include:
 - (a) All the continuous monitoring system downtime in the corresponding reporting period due to:
 - (1) Monitor equipment malfunction;
 - (2) Non-Monitor equipment malfunction;
 - (3) Quality assurance calibration;
 - (4) Other known factors;
 - (5) Unknown causes;
 - (6) Total CEMS downtime;
 - (7) (Total CEMS downtime) * 100 / (Total source operating time)
 - (b) Exceedances, defined as any emissions in excess of the limits set in Condition III.C.1 of this Attachment. The

Permittee shall follow the procedures in Section XII of Attachment "A" in reporting all exceedances.

[A.A.C.R18-2-306.A.5]

4. Performance Testing Requirement [A.A.C. R18-2-312]
- a. Within 180 days after startup, and annually thereafter, the Permittee shall conduct performance tests (as part of the RATA for the CEMS) for nitrogen oxide emissions from the boiler stack.
 - b. Subsequent performance tests for nitrogen oxide emissions being emitted from the boiler stack shall be conducted as required by the Director.
 - c. All performance testing for nitrogen oxide shall be conducted in accordance with EPA Reference Method 20.

D. Carbon Monoxide (CO)

1. Emission Limitation/Standard [A.A.C. R18-2-306.A.2, -306.01, and -331.A.3.a]
[Material Permit Conditions are indicated with underline and italics]

The Permittee shall not cause to be discharged into the atmosphere from the boiler stack, including emissions generated during start-ups and shutdowns, CO emissions in excess of 225 tons per year on a 365 day rolling total.

2. Monitoring, Recordkeeping, and Reporting Requirements

- a. *The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system (CMS), and record the output of the system, for measuring emissions of CO from the boiler stack.*

[A.A.C.R18-2-306.01, A.A.C.R18-2-331.A.3.c]

[Material permit condition is underlined and italicized]

- b. Continuous Monitoring Systems Requirements

[A.A.C.R18-2-306.01, A.A.C.R18-2-306.A.3.c and A.A.C.R18-2-312.H.3]

- i. The Permittee shall follow the monitoring procedures and performance specifications of 40 CFR 60, Appendix B and Appendix F.
- ii. The Permittee shall maintain 95 percent data recovery on all the data obtained from the CEM. Compliance with this data recovery requirement shall be determined based on total operating time of the facility during a 365 day period.
- iii. The CEMs shall be designed so that one cycle of operation is complete for each successive 15-minute period.
- iv. All data gaps shall be filled with the average hourly CO concentration and volume recorded by the CEMs for the hour

immediately before and the hour immediately after the missing data period.

- v. Instrument span shall be such that the expected output is 50 to 70 percent of span.
- c. The Permittee shall maintain a 365-day rolling total of CO emissions from the boiler to demonstrate compliance with emission limitation set in Condition III.D.1 of this Attachment. [A.A.C.R18-2-306.01.A]
- d. The Permittee shall submit a quarterly report to include the following information:
 - i. Rolling total of CO emissions on a 365 day basis in that quarterly period; and
 - iii. A monitoring systems performance report or a summary report form to include:
 - (a) All the continuous monitoring system downtime in the corresponding reporting period due to:
 - (1) Monitor equipment malfunction;
 - (2) Non-Monitor equipment malfunction;
 - (3) Quality assurance calibration;
 - (4) Other known factors;
 - (5) Unknown causes;
 - (6) Total CEMS downtime;
 - (7) $(\text{Total CEMS downtime}) * 100 / (\text{Total source operating time})$
 - (b) Exceedances, defined as any emissions in excess of the limits set in Condition III.D.1 of this Attachment. The Permittee shall follow the procedures in Section XII of Attachment "A" in reporting all exceedances. [A.A.C.R18-2-306.A.5]

3. Performance Testing Requirement [A.A.C. R18-2-312]

- a. Within 180 days after startup, and annually thereafter, the Permittee shall conduct performance tests (as part of the RATA for the CEMS) for CO emissions from the boiler stack.
- b. Subsequent performance tests for CO emissions being emitted from the boiler stack shall be conducted as required by the Director.
- c. All performance testing for CO shall be conducted in accordance with EPA Reference Method 10.

E. Sulfur Dioxide (SO₂)

1. Emission Limitations/Standards [A.A.C. R18-2-306.A.2, -306.01, and -331.A.3.a]
[Material Permit Conditions are indicated with underline and italics]
 - a. *The Permittee shall not cause to be discharged into the atmosphere from the boiler stack, including emissions generated during start-ups and shutdowns, SO₂ emissions in excess of 225 tons per year on a 365 day rolling total.*
 - b. The Permittee shall not cause to be discharged into the atmosphere from the boiler stack, more than 1.0 pounds of sulfur dioxide per million Btu heat input, maximum three-hour average, while burning solid fuel.
[A.A.C. R18-2-703.G.1]
2. Monitoring, Recordkeeping, and Reporting Requirements
 - a. *The Permittee shall install, calibrate, maintain, and operate a continuous monitoring system (CMS), and record the output of the system, for measuring emissions of SO₂ from the boiler stack.*
[A.A.C.R18-2-306.01, A.A.C.R18-2-331.A.3.c]
[Material permit condition is underlined and italicized]
 - b. Continuous Monitoring Systems Requirements
[A.A.C.R18-2-306.01, A.A.C.R18-2-306.A.3.c and A.A.C.R18-2-312.H.3]
 - i. The Permittee shall follow the monitoring procedures and performance specifications of 40 CFR 60, Appendix B and Appendix F.
 - ii. The Permittee shall maintain 95 percent data recovery on all the data obtained from the CEM. Compliance with this data recovery requirement shall be determined based on total operating time of the facility during a 365 day period.
 - iii. The CEMs shall be designed so that one cycle of operation is complete for each successive 15-minute period.
 - iv. All data gaps shall be filled with the average hourly SO₂ concentration and volume recorded by the CEMs for the hour immediately before and the hour immediately after the missing data period.
 - v. Instrument span shall be such that the expected output is 50 to 70 percent of span.
 - c. The Permittee shall maintain a 365-day rolling total of SO₂ emissions from the boiler to demonstrate compliance with emission limitation set in Condition III.E.1 of this Attachment. [A.A.C.R18-2-306.01.A]

d. The Permittee shall submit a quarterly report to include the following information:

i. Rolling total of SO₂ emissions on a 365 day basis in that quarterly period; and

iv. A monitoring systems performance report or a summary report form to include:

(a) All the continuous monitoring system downtime in the corresponding reporting period due to:

- (1) Monitor equipment malfunction;
- (2) Non-Monitor equipment malfunction;
- (3) Quality assurance calibration;
- (4) Other known factors;
- (5) Unknown causes;
- (6) Total CEMS downtime;
- (7) $(\text{Total CEMS downtime}) * 100 / (\text{Total source operating time})$

(b) Exceedances, defined as any emissions in excess of the limits set in Condition III.D.1 of this Attachment. The Permittee shall follow the procedures in Section XII of Attachment "A" in reporting all exceedances.

[A.A.C.R18-2-306.A.5]

3. Performance Testing Requirement

[A.A.C. R18-2-312]

a. Within 180 days after startup, and annually thereafter, the Permittee shall conduct performance tests (as part of the RATA for the CEMS) for SO₂ emissions from the boiler stack.

b. Subsequent performance tests for SO₂ emissions being emitted from the boiler stack shall be conducted as required by the Director.

c. All performance testing for SO₂ shall be conducted in accordance with EPA Reference Method 6.

4. Permit Shield

[A.A.C. R18-2-325]

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-703.G.1.

F. Volatile Organic Compounds (VOC)

1. Reporting Requirement [A.A.C. R18-2-306.A.5]

Upon completion of the performance test required in Condition III.F.2, the Permittee shall submit calculations of the estimated VOC emissions from the boiler, based on the results of the performance test.

2. Performance Testing Requirement [A.A.C. R18-2-312]

- a. Within 180 days after startup, the Permittee shall conduct a performance test for VOC emissions from the boiler stack.
- b. Subsequent performance tests for VOC emissions being emitted from the boiler stack shall be conducted as required by the Director.
- c. All performance testing for VOC shall be conducted in accordance with either EPA Reference Method 25 or 25A, whichever is appropriate.
- d. All performance testing for VOC shall be done under normal wood waste and fiber waste firing rates.

G. Hazardous Air Pollutants

1. Emission Limitations/Standards

- a. *The Permittee shall not cause to be discharged into the atmosphere from the boiler stack, including emissions generated during start-ups and shutdowns, total hazardous air pollutant emissions in excess of 0.0151 lbs/MMBtu on a three hour average.*

[A.A.C. R18-2-306.A.2, -306.01, and -331.A.3.a]
[Material Permit Conditions are indicated with underline and italics]

- b. *The Permittee shall not cause to be discharged into the atmosphere from the boiler stack, including emissions generated during start-ups and shutdowns, emissions of any single hazardous air pollutant in excess of 0.00606 lbs/MMBtu on a three hour average.*

[A.A.C. R18-2-306.A.2, -306.01, and -331.A.3.a]
[Material Permit Conditions are indicated with underline and italics]

2. Monitoring, Recordkeeping, and Reporting Requirement

- a. Upon completion of the initial performance test required in Condition III.G.3.a, the Permittee shall submit speciated calculations of the hazardous air pollutant emissions from the boiler, based on the results of the performance test. [A.A.C. R18-2-306.A.5]
- b. At the end of each month, the Permittee shall calculate and record a rolling 12-month total of HAP emissions based on the most recent performance test and the amount of fuel combusted. [A.A.C. R18-2-306.A.4]

3. Performance Testing Requirement [A.A.C. R18-2-312]

- a. Within 180 days after startup, the Permittee shall conduct an initial performance test for speciated and total hazardous air pollutant emissions from the boiler stack. Additional performance tests shall be conducted annually thereafter. Hazardous air pollutants shall include the following:
 - i. All metal HAPs detected by EPA Reference Method 29;
 - ii. Inorganic HAPs including hydrogen chloride and chlorine;
 - iii. Organic HAPs including acetaldehyde, acrolein, benzene, formaldehyde, and toluene;
 - iv. All other HAPs that will be detected by the EPA Reference Methods used in Conditions III.G.2.a.i through III.G.2.a.iii.
- b. Subsequent performance tests for hazardous air pollutant emissions being emitted from the boiler stack shall be conducted as required by the Director.
- c. All performance testing for hazardous air pollutants shall be conducted in accordance with the following:
 - i. Metal HAPs - EPA Reference Method 29;
 - ii. All other HAPs – Methods as approved by the Director in the Test Plan required by Condition XVIII.D of Attachment “A”.
- d. All performance testing for hazardous air pollutants shall be done under normal wood waste and fiber waste firing rates.

IV. COOLING TOWER REQUIREMENTS

Particulate Matter and Opacity

A. Emission Limitations/Standards

- 1. Until April 23, 2006, the Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any cooling tower stack, opacity which exceeds 40% as measured by EPA Reference Method 9.
[A.A.C. R18-2-702.B.2]
- 2. After April 23, 2006, the Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any cooling tower stack, opacity which exceeds 20% as measured by EPA Reference Method 9.
[A.A.C. R18-2-702.B.3]

3. If the presence of uncombined water is the only reason for an exceedance of any visible emissions requirement in this Section, the exceedance shall not constitute a violation of the applicable opacity limit. [A.A.C. R18-2-702.C]

- B.** The Permittee shall not cause, allow, or permit the particulate matter discharge into the atmosphere in any 1 hour from the cooling towers in total quantities in excess of the amount calculated by the following equation:

$$E = 55.0P^{0.11} - 40$$

where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour.

[A.A.C. R18-2-730.A.1]

C. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-730.A.1, A.A.C. R18-2-702.B.2, A.A.C. R18-2-702.B.3, and A.A.C. R18-2-702.C. [A.A.C. R18-2-325]

V. FUGITIVE DUST REQUIREMENTS

A. Applicability

This Section applies to any source of air contaminants which, due to lack of an identifiable emissions point or plume, cannot be considered a point source.

B. Particulate Matter and Opacity

1. Open Areas, Roadways & Streets, Storage Piles, and Material Handling

a. Emission Limitations/Standards

(1) Opacity of emissions from any nonpoint source shall not be greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9. [A.A.C. R18-2-612]

(2) The Permittee shall employ the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:

- (a) Keep dust and other types of air contaminants to a minimum in an open area where construction operations, repair operations, demolition activities, clearing operations, leveling operations, or any earth moving or excavating activities are taking place, by good modern

practices such as using an approved dust suppressant or adhesive soil stabilizer, paving, covering, landscaping, continuous wetting, detouring, barring access, or other acceptable means; [A.A.C. R18-2-604.A]

(b) Keep dust to a minimum from driveways, parking areas, and vacant lots where motor vehicular activity occurs by using an approved dust suppressant, or adhesive soil stabilizer, or by paving, or by barring access to the property, or by other acceptable means; [A.A.C. R18-2-604.B]

(c) Keep dust and other particulates to a minimum by employing dust suppressants, temporary paving, detouring, wetting down or by other reasonable means when a roadway is repaired, constructed, or reconstructed; [A.A.C. R18-2-605.A]

(d) Take reasonable precautions, such as wetting, applying dust suppressants, or covering the load when transporting material likely to give rise to airborne dust; [A.A.C. R18-2-605.B]

(e) Take reasonable precautions, such as the use of spray bars, wetting agents, dust suppressants, covering the load, and hoods when crushing, handling, or conveying material likely to give rise to airborne dust; [A.A.C. R18-2-606]

(f) Take reasonable precautions such as chemical stabilization, wetting, or covering when organic or inorganic dust producing material is being stacked, piled, or otherwise stored; [A.A.C. R18-2-607.A]

(g) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material, or with the use of spray bars and wetting agents; [A.A.C. R18-2-607.B]

(h) Any other method as proposed by the Permittee and approved by the Director. [A.A.C. R18-2-306.A.3.c]

b. Monitoring and Recordkeeping Requirements

(1) The Permittee shall maintain records of the dates on which any of the activities listed in Conditions V.B.1.a(2)(a) through V.B.1.a(2)(h) above were performed and the control measures that were adopted. [A.A.C. R18-2-306.A.3.c]

(2) Opacity Monitoring Requirements

(a) A certified Method 9 observer shall conduct a quarterly visual survey of visible emissions from the non-point sources. The Permittee shall keep a record of the name of the observer, the date and location on which the observation was made, and the results of the observation.

(b) If the observer sees a plume from a non-point source that on an instantaneous basis appears to exceed 40%, then the observer shall, if practicable, take a six-minute Method 9 observation of the plume.

i. If the six-minute opacity of the plume is less than or equal to 40%, the observer shall make a record of the following:

a) Location, date, and time of the observation; and

b) The results of the Method 9 observation.

ii. If the six-minute opacity of the plume exceeds 40%, then the Permittee shall do the following:

a) Adjust or repair the controls or equipment to reduce opacity to below 40%; and

b) Report it as an excess emission under Section XII.A of Attachment "A".

[A.A.C. R18-2-306.A.3.c]

c. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-604.A, A.A.C. R18-2-604.B, A.A.C. R18-2-605, A.A.C. R18-2-606, A.A.C. R18-2-607, and A.A.C. R18-2-612.

[A.A.C. R18-2-325]

2. Open Burning

a. Emission Limitation/Standard

Except as provided in A.A.C. R18-2-602.C(1), C(3), and C(4), and except when permitted to do so by either ADEQ or the local officer delegated the authority for issuance of open burning permits, the Permittee shall not conduct open burning.

[A.A.C. R18-2-602]

b. Monitoring and Recordkeeping Requirement

Compliance with the requirements of Condition V.B.2.a above may be demonstrated by maintaining copies of all open burning permits on file.

[A.A.C. R18-2-306.A.3.c]

c. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-602.

[A.A.C. R18-2-325]

VI. MOBILE SOURCE REQUIREMENTS

A. Applicability

The requirements of this Section are applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or are agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.89. [A.A.C.R18-2-801]

B. Particulate Matter and Opacity

1. Emission Limitations/Standards

a. Off-Road Machinery

The Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than ten consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. Off-road machinery shall include trucks, graders, scrapers, rollers, and other construction and mining machinery not normally driven on a completed public roadway.

[A.A.C.R18-2-802.A]

b. Roadway and Site Cleaning Machinery

(1) The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than ten consecutive seconds, the opacity of which exceeds 40%. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [A.A.C.R18-2-804.A]

(2) The Permittee shall take reasonable precautions, such as the use of dust suppressants, before the cleaning of a site, roadway, or alley. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by

trucking or earth moving equipment, erosion by water or by other means. [A.A.C. R18-2-804.B]

c. Unless otherwise specified, no mobile source shall emit smoke or dust the opacity of which exceeds 40%. [A.A.C.R18-2-801.B]

2. Recordkeeping Requirement

The Permittee shall keep a record of all emissions related maintenance activities performed on the Permittee's mobile sources stationed at the facility as per manufacturer's specifications. [A.A.C.R18-2-306.A.5.a]

3. Permit Shield

Compliance with the conditions of this Section shall be deemed compliance with A.A.C. R18-2-801, A.A.C. R18-2-802.A, A.A.C. R18-2-804.A and A.A.C. R18-2-804.B. [A.A.C.R18-2-325]

VII. OTHER PERIODIC ACTIVITY REQUIREMENTS

A. Abrasive Blasting

Particulate Matter and Opacity

1. Emission Limitations/Standards

a. The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

- (1) wet blasting;
- (2) effective enclosures with necessary dust collecting equipment; or
- (3) any other method approved by the Director.

[A.A.C. R18-2-726]

b. Opacity

(1) Until April 23, 2006, the Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 40% opacity as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B.2]

(2) After April 23, 2006, the Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations to exceed 20% opacity as measured by EPA Reference Method 9. [A.A.C. R18-2-702.B.3]

2. Monitoring and Recordkeeping Requirement

Each time an abrasive blasting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following:

- a. The date the project was conducted;
- b. The duration of the project; and
- c. Type of control measures employed.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-726, A.A.C. R18-2-702.B.2, and A.A.C. R18-2-702.B.3.

[A.A.C.R18-2-325]

B. Use of Paints

1. Volatile Organic Compounds

a. Emission Limitations/Standards

While performing spray painting operations, the Permittee shall comply with the following requirements:

- (1) The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations, other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the overspray.

[A.A.C.R18-2-727.A]

- (2) The Permittee or their designated contractor shall not either:

- (a) Employ, apply, evaporate, or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or

- (b) Thin or dilute any architectural coating with a photochemically reactive solvent. [A.A.C.R18-2-727.B]

- (3) For the purposes of Conditions VII.B.1.a(2) and VII.B.1.a(5), a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in Conditions VII.B.1.a(3)(a) through VII.B.1.a(3)(c) below, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:

(a) A combination of the following types of compounds having an olefinic or cyclo-olefinic type of unsaturation-hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: 5 percent.

(b) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent.

(c) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

[A.A.C.R18-2-727.C]

(4) Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups of organic compounds described in Conditions VII.B.1.a(3)(a) through VII.B.1.a(3)(c) above, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.

[A.A.C.R18-2-727.D]

(5) The Permittee shall not dispose of by evaporation more than 1.5 gallons of photochemically reactive solvent in any one day.

[SIP Provision R9-3-527.C]

b. Monitoring and Recordkeeping Requirements

(1) Each time a spray painting project is conducted, the Permittee shall log in ink, or in an electronic format, a record of the following:

(a) The date the project was conducted;

(b) The duration of the project;

(c) Type of control measures employed;

(d) Material Safety Data Sheets for all paints and solvents used in the project; and

(e) The amount of paint consumed during the project.

(2) Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of Condition VII.B.1.b(1) above.

[A.A.C. R18-2-306.A.3.e]

c. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C.R18-2-727 and SIP Provision R9-3-527.C. [A.A.C. R18-2-325]

2. Opacity

a. Emission Limitation/Standard

(1) Until April 23, 2006, the Permittee shall not cause, allow or permit visible emissions from painting operations in excess of 40% opacity as measured by EPA Reference Method 9.

[A.A.C. R18-2-702.B.2]

(2) After April 23, 2006, the Permittee shall not cause, allow or permit visible emissions from painting operations to exceed 20% opacity as measured by EPA Reference Method 9.

[A.A.C. R18-2-702.B.3]

b. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C.R18-2-702.B.2 and A.A.C. R18-2-702.B.3. [A.A.C. R18-2-325]

C. Demolition/Renovation - Hazardous Air Pollutants

1. Emission Limitation/Standard

The Permittee shall comply with all of the requirements of 40 CFR 61 Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos).

[A.A.C. R18-2-1101.A.8]

2. Monitoring and Recordkeeping Requirement

The Permittee shall keep all required records in a file. The required records shall include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

[A.A.C. R18-2-306.A.3.c]

3. Permit Shield

Compliance with the conditions of this Part shall be deemed compliance with A.A.C. R18-2-1101.A.8.

[A.A.C. R18-2-325]

ATTACHMENT "C": EQUIPMENT LIST

**Air Quality Control Permit No. 36183
For
Snowflake White Mountain Power, LLC**

EQUIPMENT TYPE	MAX. CAPACITY	MAKE	MODEL	SERIAL NUMBER	DATE OF MFG.
Boiler	340 MMBtu	Babcock and Wilcox	2 drum	Not available	1966
Multicone Collectors	150,000 acfm	Barrons	14K35-0710	Not Available	1993
Fabric Filter	150,000 acfm	Wheelabrator	Pulse-jet	TBD	1990
Cooling Tower	28,000 gpm	Marley	Mechanical Draft	TBD	TBD
Disc Screen	30 ton/hr	Rader	40-11	338589	2002
Hammer Hog	20 ton/hr	Weston	30-in	Not available	1966

TBD = to be determined