ADMINISTRATIVE RECORD INDEX FOR NPDES PERMIT NN0000019 January 13, 2020

- 1. NPDES Permit Application Forms and supplementary information submitted by Permittee dated October 05, 2005.
- 1.1 NPDES Permit supplementary information.
 - a. Letter from David Saliba, APS to Martha Segall, EPA HQ January 4, 2005. Re: 316(b) Phase II Rule.
 - b. Letter from Jeffrey Cole, Dept. of Fish and Wildlife, to Carl Woolfolk, APS. February 18, 2005.
 - Letter from David Saliba, APS, to Nancy Yoshikawa, EPA April 18, 2005
 Re: Proposal for Information Collection (PIC) by APS and attached PIC dated April 2005.
 - d. Letter from Doug Eberhardt, EPA, to David Saliba, APS, July 6, 2005. Re: PIC.
 - e. Letter from David Saliba, APS, to Doug Eberhardt, EPA August 1, 2005. Re: FCPP, 316(b) PIC. Response to EPA letter dated July 6, 2005.
 - f. Letter from David Saliba, APS to Doug Eberhardt, November 8, 2005, Re: Permit Renewal Application amendment.
 - g. Letter from David Saliba, APS to Nancy Yoshikawa, EPA, November 29, 2006 Re: Reconsideration of Classification of the APS FCPP under 316(b).
 - h. Letter from David Saliba, APS to Doug Eberhardt, EPA, December 11, 2009 Re: NPDES Permit Change in Signatories.
 - i. Letter from Doug Eberhardt, EPA to David Saliba, APS March 07, 2007 Re: Response to APS letter dated November 29, 2006.
 - j. Letter from David Saliba, APS to Doug Eberhardt, EPA May 4, 2007 Re: Permit Renewal Application; Corrections.
 - k. Letter from David Saliba, APS to Doug Eberhardt, EPA November 17, 2009 Re: Permit Renewal; Corrections and Permit Change Requests.
 - 1. Letter from John Franchini, APS, to Glenn Sakamoto, EPA April 25, 2011, Re: Five- day follow-up letter for minor spill.
 - m. Letter from John Franchini, APS to Doug Eberhardt, EPA August 8, 2011 Re: NPDES Permit Signatory Change.
 - n. Letter from Larry Francis, APS, to Doug Eberhardt, EPA August 10, 2012 Re: NPDES Permit Signatory Change.
 - o. Results of Chronic Toxicity Tests on Effluent from APS FCPP Collected August 20-24, 2012, Aquatic Consulting & Testing Inc.
 - p. Letter from David Bloomfield, APS to Glenn Sakamoto, EPA December 21, 2012, Re: Five-day follow-up letter for minor spill.
- 2. 2013 NPDES Permit Re-Application.
 - a. Letter from David Smith, EPA to David Bloomfield, APS requesting submittal or a new revised application. October 30, 2012.
 - b. Priority Pollutant Scan Data October 2012.
 - c. Compliance Evaluation Inspection Report for APS Four Corners Power

- Plant, August 9, 2012.
- d. Email from Michele Robertson, APS to Gary Sheth, EPA re: Questions about Morgan Lake Intake August 08, 2014.
- e. Correspondence between APS and EPA re: Toxicity monitoring frequency reduction May 05, 2003 and June 30, 2003.
 - 1. Letter from David Saliba, APS, to Alexis Strauss, EPA. May 5, 2003.
 - 2. Letter from Terry Oda, EPA, to David Saliba, APS. June 30, 2003.
- f. NPDES Permit Re-Application Forms and supplementary information submitted by Permittee dated February 15, 2013.
 - i. APS Revised Permit App. Cover Letter.
 - ii. APS Revised Permit App. General Info.
 - iii. APS Revised Permit App. Sch. 2.C.
 - iv. APS Revised Permit App. Section 4-5.
 - v. APS Revised Permit App. Section 6-10.
 - vi. APS Revised Permit App. Section 11p1.
 - vii. APS Revised Permit App. Section 11p2.
 - viii. APS Revised Permit App. Section 11p3.
 - ix. APS Revised Permit App. Section 11p4.
 - x. APS Revised Permit App. Section 11p.5.
 - xi. APS Revised Permit App. Section 11p6.
 - xii. APS Revised Permit App. Section 11p7.
 - xiii. APS Revised Permit App. Section 12-14.
- 2.1 NPDES Permit supplementary information.
 - a. Letter from David Bloomfield, APS to David Smith, EPA Re: New Product Testing Approval for Anodamine as substitute for Hydrazine March 15, 2013.
- 2.2 NPDES Permit for Navajo Mine.
 - a. 2007 Draft Permit.
 - b. Comments for San Juan Citizens Alliance, March 2, 2007.
 - c. Comments for BHP Navajo Coal Company, November 5, 2007.
 - d. Response to Comments Document.
 - e. 2015 Draft Permit and Factsheet.
 - f. Email from John Barth to Gary Sheth, EPA Re: Comment Letter with attachments September 18, 2015
 - g. 2018 Final Issued Permit and Factsheet.
 - h. 2018 Final Response to Comments.
- 3. EPA NPDES Permit Writers Manual (EPA-833-B-96-003 September 2010).
- 4. EPA Technical Support Document for Water Quality-Based Toxics Control (EPA/505/2-98-001, March 1991).
- 5. Interim Final Regions 9 and 10 Guidance for Implementing Whole Effluent Toxicity Testing Programs, May 31, 1996.

- 6. Standards Documents for Permit Development.
 - a. ELG Standards. Title 40 Code of Federal Regulations. Part 423. November 19, 1982.
 - b. Navajo Nation Surface Water Quality Standards 2007. Passed by Navajo Nation Resources Committee May 13, 2008.
 - c. Memo to file from Gary Sheth re: reasonable potential analysis November 10, 2014.
 - d. Final Regs to Establish Requirements for Cooling Water Intake Structures at Existing Facilities, August 15, 2014.
 - e. Memo from Deborah G. Nagle, EPA re: CWA 316(b) Regulations for Cooling Water Intake at Existing Facilities. December 11, 2014.
 - f. Technical Development Document for the Final 316(b) Rule, May 2014.
- 6.1 Supplemental Standards Documents etc. for Permit Development.
 - a. Memo to file from re: Updated reasonable potential April 22, 2019.
 - b. Summary of data from Navajo EPA during public comments (see 10.).
 - c. Final Regs to Establish Requirements for Cooling Water Intake. Structures at Existing Facilities, August 15, 2014.
 - d. Preamble final Rule ELG FR November 3, 2015.
 - e. Postponement Rule 316(b) FR September 18, 2017.
 - f. Email from Amelia Whitson, EPA, to Gary Sheth, EPA, November 1, 2018, Re: Entrainment Standards.
 - g. Email from Sean Ramach, EPA, to Gary Sheth, EPA, November 19, 2018, Re: Draft APS FCPP Revisions for ELG and 316(b).
- 6.2 Review of TDS Salinity Data and Reasonable Potential Analysis.
 - a. Email from Jeffrey Allmon, APS, to Dustin Minor, EPA. September 27, 2019.
 - b. Review of TDS and Salinity Data and Reasonable Potential Analysis. September 27, 2019.
- 6.3 Discharge Monitoring Reports (DMR) Link.
- 7. ESA Documents.
 - a. Amendment to Four Corners Power Plant/Navajo Mine Project Biological Assessment. OSMRE. March 13, 2015.
 - b. Four Corners Power Plant and Navajo Mine Energy Project Biological Assessment. Final. Office of Surface Mining Reclamation and Enforcement (OSMRE). August 08, 2014.
 - c. List of endangered, threatened and proposed species that may occur in project area. Consultation Tracking Number: 02ENNM00-2014-SL1- 0511. September 02, 2014.
 - d. Letter from Gary Sheth, EPA, to Joel Lusk, USFWS, New Mexico Ecological Services Field Office, with attached copy of the NPDES Permit Application received from APS. June 23, 2014.
 - e. Final Biological Opinion for the Navajo-Gallup Water Supply Project. February 26, 2009.

- f. Evaluation for the Need for Fish Passage at the APS and Fruitland Irrigation Diversion Structures. Final Report. October 2005.
- g. Memo to file re: ESA consultation November 10, 2014.
- h. Letter from Susan Millsap, USFWS, to Nicole Caveny, OSMRE June 25, 2018.
- i. Final Biological Opinion for the Four Corners Power Plant and Navajo Mine Energy Project. April 8, 2015.

7.1 Additional ESA Documents.

- a. Memo to file re: Updated Review of Information & Literature for ESA April 28, 2019.
- b. Species by County Report April 28, 2019.
- c. Canada Lynx Recovery Outline. Report. September 14, 2005.
- d. Email from Joel Lusk, USFWS to Tom Hagler, EPA, April 23, 2019.
- 8. APS Four Corners Power Plant. Documents re: groundwater data presentation. April 2013.
 - a. Cover letter to Rick Williamson, OSMRE regarding Water Quality Data. April 3, 2013.
 - b. Boron Factsheet. April 3, 2013.
 - c. APS Geohydrology Submittal Final. February 13, 2013.
 - d. Four Corners Boron Timeline.
 - e. FCPP Groundwater Quality Data Submittal. March 25, 2013.
 - f. Surface Water Quality Data. 1987.
 - g. Groundwater Data for 1987 and 1992.
 - h. Groundwater Data for 2011 and 2012.
 - i. FCPP Historic Groundwater Data 1988-2009.
 - j. FC Historic Surface Water Data.
 - k. Four Corners-Chaco Surface Water Quality Data 2008-2009.
 - 1. Four Corners Power Plant Groundwater Monitoring Data 1987-2012.
 - m. Wells LS-1 and LS-2 Water Quality Data 2004-2009.

8.1 Additional documents regarding groundwater

- a. Email from Jeffrey Allmon, Pinnacle West, to Gary Sheth, EPA. March 19, 2018, with attachments.
 - i. FC Monitor Well locations 2014.
 - ii. MW-6L and B chart. Boron and Groundwater elevation.
 - iii. MW-15 WL and B chart. Boron and Groundwater elevation.
 - iv. MW-18L chart. Groundwater levels chart.
 - v. Seeps Boron concentrations chart.
 - vi. South Intercept Trench Monitoring Wells January 17, 2014.
- 9. Public Notice materials prepared for Public Notice on November 13, 2014, and Public Workshops and Hearing conducted on December 15-16, 2014.

- 10. Comments Received.
 - a. Comments from Law Office of John M. Barth, February 18, 2015. Two CDs attached.
 - b. Comments from Thomas Livingston, APS, January 8, 2015.
 - c. Public Hearing materials (in English and Dine) including Notice of hearing, summary of action, speaker cards, sign-in sheets (no oral comments or written comments received at hearing) December 15 and 16, 2014.
- 11. Pumping Plan for Water from San Juan to Morgan Lake.
 - a. Email from Neal Brown, APS June 5, 2018 to Gary Sheth, EPA. Two attached documents.
 - b. Email from Jeffrey Allmon, APS to Gary Sheth, EPA. June 5, 2019. Three attached documents (including the December 6, 2016 Pumping Plan Power Point; the February 9, 2017 Email from Nathan Franssen, USFWS to Richard L. Grimes, APS; and the San Juan River Pumping Station, Pumping Plan).
- 12. FCPP/Navajo Mine Energy Project NEPA Environmental Impact Statement Documents.
 - a. Presentation from APS & BHP Navajo Coal Company on the Four Corners & Navajo Mine Energy Project (FCPP & NMEP).
 - b. Letter from Salazar, OSMRE to Ben Shelly, President, Navajo Nation June 7, 2012 Re: OSMRE to be lead agency on FCPP & NMEP.
 - c. Letter from David Smith, EPA to Marcello Calle, OSMRE October 11, 2012, Re: NHPA and NEPA Consultation for FCPP & NMEP.
 - d. Letters from OSMRE:
 - i. From Rick Williamson, OSMRE. December 20, 2013 (Preliminary EIS)
 - ii. From Marcelo Calle, OSMRE. March 28, 2014 (Draft EIS).
 - iii. From Mychal Yellowman, OSMRE. May 5, 2015 (Final EIS).
 - e. See FCPP & NMEP documents available in the link provided in the May 15, 2015, Mychal Yellowman Letter cited immediately above at 12.d.iii.
- 13. Programmatic Agreement for NHPA Section 106.
 - a. Memo to file January 7, 2015 Re: Programmatic Agreement for FCPP under Section 106 of National Historic Preservation Act (NHPA).
 - b. Signed NHPA Final Programmatic Agreement for the FCPP & NMEP December 23, 2014.
 - c. Letter from Gary Sheth, EPA to Jeremy Illif, OSMRE January 15, 2015 Re: Transmittal of Signed Programmatic Agreement.
- 14. Jurisdictional Status of Morgan Lake Documents.
 - a. Federal Register Part 328 Definition of Waters of the United States June 29, 2015.
 - b. Email from Deanna Cummings, USACE, to Tom Hagler, EPA, dated January 4, 2019, re: Status of Morgan Lake.
 - c. Memorandum from Gary Sheth, EPA, to Administrative Record dated July 20, 2017 regarding Morgan Lake Status.

- d. Email from Jeffrey Allmon, Pinnacle West, to Tom Hagler and Gary Sheth, EPA, dated March 18, 2017.
- 15. CWA Section 401 Certification.
 - a. Letter from Jeffrey Jenkins, Plant Manager, APS to Tomás Torres, Director Water Division, EPA March 27, 2019 Re: Water Quality Certification for renewal for FCPP NPDES Permit.
 - b. Letter from Alexis Strauss, Water Division Director, EPA to Joe Shirley,
 President of Navajo Nation, March 26, 2009 Re: Approval of Navajo Water Quality Standards.
 - c. Memo from Elizabeth Goldman, EPA to Gary Sheth, EPA May 30, 2018 Re: CWA 401 Waiver for FCPP Permit.
 - d. Email from Patrick Antonio, NNEPA to Gary Sheth, EPA, May 31, 2017 Re: Morgan Lake and 401 Cert. with three attachments.
- 16. FCPP-Navajo Mine Biological Conservation Measures Workgroup Documents.
 - a. BO Conservation Measures Implementation Kick Off Meeting Agenda January 26-27, 2016.
 - b. BO Conservation Implementation Committee Meeting Minutes May 3, 2016.
 - c. BO Conservation Measures Implementation Meeting Agenda December 6, 2016.
 - d. Discharge Screen Feasibility Study APS Burns and McDonnell (Undated).
 - e. SJRRIP FY2017 Budget Estimates.
 - f. Spill Contingency and Countermeasures Plan APS Presentation December 19, 2017. With FCPP Ash pond EAP on Disc.
 - g. Letters from EPA to OSMRE Re: BO Annual Report Status of EPA actions:
 - i. David Smith, EPA, to Alex Birchfield, OSMRE. March 31, 2017
 - ii. David Smith, EPA, to Alex Birchfield, OSMRE. May 24, 2018
 - iii. Elizabeth Sablad, EPA, to Alex Birchfield, OSMRE. May 20, 2019.
 - h. Letters from OSMRE to USFWS Re: BO Annual Report.
 - i. From Alex Birchfield, OSMRE, to Nathan Franssen, USFWS. May 19, 2017.
 - ii. From Alex Birchfield, OSMRE, to Nathan Franssen, USFWS. May 30, 2018.
 - iii. From Alex Birchfield, OSMRE, to Nathan Franssen, USFWS. May 30, 2019.
- 17. Final Issuance Package June 2018 including:
 - a. Final Permit.
 - b. Final Factsheet.
 - c. Final Response to Comments.
- 18. Documents shared with Western Environmental Law Center re: RTC.
 - a. Letter to Gary Sheth, EPA from Daphne Place-Hoskie, BHP Billiton September 18, 2015 Re: BHP Billiton NPDES Permit No. NN028193.
 - b. Email to John Barth from Gary Sheth, EPA, July 9, 2018 with attached memo

- dated 7-20-17.
- c. Email to John Barth from Gary Sheth, EPA, July 3, 2018 with four attachments responding to 1-4 of 5 documents requested.
- d. Email to John Barth from Gary Sheth, EPA, July 13, 2018 responding to 5 of 5 documents requested.
- 19. Western Environmental Law Center Appeal to EAB documents.
 - a. Link to the EAB Docket for Arizona Public Service, NPDES 18-02.
 - b. Notice of Withdrawal of FCPP Permit December 19, 2018.
 - c. Petition for Writ of Mandamus May 23, 2018.
- 20. Public Notice Materials prepared for April 2019.
 - Public Notice in the Navajo Times and Farmington Daily Times April 25, 2019.
 - b. Three Letters notifying APS, USFWS, and OSMRE re: the publication of the proposed permit and fact sheet. April 30, 2019.
 - c. Proposed Fact Sheet. April 30, 2019.
 - d. Proposed Permit. April 30, 2019.
- 20.1 Comments Received on Proposed Permit.
 - a. Comments from John Barth et. al. July 01, 2019. (with 77 attachments)
 - b. Comments from Jeffrey Jenkins, APS FCPP. June 27, 2019.
- 21. APS ELG Statement and Supporting Docs.
 - a. Email from Jeffrey Allmon, Pinnacle West to Gary Sheth and Dustin Minor, EPA April 4, 2019 Re: Updated ELG Project Summary.
 - b. Meeting Notice, Jeffrey Allmon, Pinnacle West March 25, 2019 Re: walk-thru of attached schematic related to ELG Project.
- 22. Records of Communication August-September 2019.
- 23. 401 Certification for APS Permit, September 30, 2019.
- 24. Aerial Photographs.
 - a. FCPP with Chaco-San Juan River confluence.
 - b. Morgan Lake with APS FCPP.
- 25. Final Petition for Review, November 1, 2019.
- 26. Final Issuance Package September 2019.
 - a. Letter to Neal Brown from Tomás Torres, EPA. September 30, 2019.
 - b. Final Permit. September 30, 2019.
 - c. Final Permit Factsheet. September 30, 2019.
 - d. Final Response to Comments. September 30, 2019.
- 27. Navajo Nation Data.

- a. Email from Steve Austin, Navajo Nation EPA (NNEPA) to Gary Sheth, EPA, January 7, 2015 with attached data spreadsheet.
- b. Email from Steve Austin, NNEPA to Gary Sheth, April 19, 2019 with attached updated data spreadsheet. (See Excel Spreadsheet with the data).
- 28. Previous Permits.
 - a. NPDES Permit 1993.
 - b. NPDES Permit 2001.
- 29. Memorandum from Robert Perciasepe, EPA to W. Ray Cunningham, Water Management Division, EPA, December 13, 1993.

Certification of Complete Administrative Record

I, Gary Sheth, a Life Scientist and the permit writer for the NPDES Permit No. NN0000019 certify that the administrative record for the final permit decision is complete. The administrative record includes, to the best of my knowledge, the documents that form the basis of the final permit decision required under 40 C.F.R Section 124.18. The above Administrative Record Index references all documents in the administrative record for this final permit decision.

Gary Sheth, Permit Writer

NPDES Permits Section, U.S. EPA Region 9

1-13-2020

Date