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U.S. DISTRICT COURT
DISTRICT OF WYOMING

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CHEYENNE

UNITED STATES DISTRICT COURT DISTRICT OF WYOMING

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UNITED STATES OF AMERICA,)) Civil No. 20-CV-125-F
Plaintiff,)
v.) CONSENT DECREE
J.R. SIMPLOT COMPANY and)
SIMPLOT PHOSPHATES, LLC,)
Defendants.	_)

CONSENT DECREE

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WHEREAS, Plaintiff, the United States of America, on behalf of the United States

Environmental Protection Agency ("EPA"), ("United States" or "Plaintiff"), has filed a

complaint ("Complaint") alleging that Defendants J.R. Simplot Company and Simplot

Phosphates, LLC ("Simplot" or "Defendants") have violated the Resource Conservation and

Recovery Act ("RCRA"), 42 U.S.C. §§ 6901 - 6992k, and implementing federal and state

regulations, and the Emergency Planning and Community Right-to-Know Act ("EPCRA"), 42

U.S.C. §§ 11001 - 11050, at Simplot's phosphoric acid and fertilizer manufacturing plant located

near Rock Springs, Wyoming ("Facility");

WHEREAS, the Complaint includes allegations, disputed by Simplot, that Simplot failed to characterize and illegally treated, stored, or disposed of hazardous wastes from various processes at its Facility, including: the production of granulated fertilizers, such as monoammonium phosphate ("MAP"), and of fluorosilicic acid ("FSA"); wastes generated during cleaning of phosphoric acid, super phosphoric acid ("SPA") and fertilizer plant equipment; wastewaters generated from the manufacture of SPA and from scrubbers used to control air pollution from the phosphoric acid plant; and other chemical and waste management processes at its Facility without a RCRA permit or interim status. The Complaint also alleges, and Simplot disputes, that Simplot illegally placed hazardous wastes in a Phosphogypsum Stack System dedicated for managing phosphoric acid production wastes excluded from hazardous waste regulation pursuant to 40 C.F.R. § 261.4(b)(7) (the "Bevill Exclusion"), thus violating Sections 3004 and 3005 of RCRA, 42 U.S.C. §§ 6924-25, and the applicable regulations in 40 C.F.R. Parts 260-270, as adopted by reference in the Wyoming Hazardous Waste

Management Rules, Chapter 20-3 of Wyoming Administrative Code ("W.A.C."), and that those hazardous wastes remain at the Facility;

WHEREAS, the Complaint includes allegations, disputed by Simplot, that Simplot failed to submit complete annual Form R reports to the toxics release inventory, pursuant to EPCRA Section 313, 42 U.S.C. § 11023, to include certain compounds for reporting years 2004 through 2010, and to include certain additional compounds through reporting year 2013, in violation of 40 C.F.R. § 372.30;

WHEREAS, Simplot and the United States engaged in discussions concerning potential methodologies Simplot could use under EPCRA Section 313 to include in its Form R annual reports that would be intended to provide a reasonable estimate of the quantities of certain metals that the United States contends should be considered to have been manufactured (as a consequence of the digestion of ore), processed (as a consequence of placing metal compounds removed from the production process as a byproduct and reintroducing them into the production process), or released at the Facility. As a result of those discussions, Simplot revised its reporting for its annual Form R reports beginning for reporting year 2011, and further revised its reporting for reporting years from 2014 to the present, based on a methodology intended by Simplot to provide such reasonable estimates consistent with the requirements of EPCRA;

WHEREAS, Simplot denies the applicability of Subtitle C of RCRA and the regulations promulgated thereunder to certain waste and materials management practices at the Facility that are the subject of the Complaint; denies the alleged EPCRA reporting violations that are the subject of the Complaint; denies any non-compliance or violation of any law or regulation identified in the Complaint; and maintains that it has been and remains in compliance with

EPCRA and RCRA, in particular the Bevill Exclusion, and is not liable for civil penalties or injunctive relief as alleged in the Complaint;

WHEREAS, Simplot and EPA voluntarily entered into an Administrative Order on Consent pursuant to RCRA § 3013(a), 42 U.S.C. § 6934(a) ("3013 Order"), whereby Simplot agreed to implement soil, sediment, surface water, and groundwater sampling, analysis, monitoring, and reporting at the Facility in an effort to characterize the source(s) of contamination; characterize the potential pathways of contaminant migration; define the degree and extent of contamination; and identify actual or potential human and/or ecological receptors to fully determine the nature and extent of the presence and/or release of hazardous wastes at or from the Facility;

WHEREAS, in response to the 3013 Order, Simplot designed and implemented soil, sediment, surface water, and groundwater investigation and monitoring work plans at the Facility with the participation of EPA and the Wyoming Department of Environmental Quality ("Wyoming DEQ"). Simplot has completed investigative work under the 3013 Order to characterize the source(s), potential pathways, and the extent of contamination and has submitted reports to EPA and Wyoming DEQ describing Simplot's delineation activities and the results, pursuant to which EPA concluded that Simplot met all the requirements of the 3013 Order and closed the 3013 Order on July 19, 2018;

WHEREAS, the objective of the Parties in this Consent Decree is to resolve the civil claims alleged in the Complaint by establishing certain injunctive relief whereby Simplot shall change certain operating practices with respect to its management of hazardous wastes or process materials and Bevill-Excluded Wastes and implement environmental controls and financial assurance as set forth herein; and, by assessing an appropriate penalty;

WHEREAS, Simplot has conducted itself in good faith in its discussions with the Plaintiff concerning the violations alleged in the Complaint, and has already implemented certain operational changes and corrective measures at and with respect to the Facility, thus obviating certain injunctive relief;

WHEREAS, by agreeing to entry of this Consent Decree, Simplot makes no admission of law or fact with respect to the allegations in the Complaint and continues to deny any non-compliance or violation of any law or regulation identified therein or in this Consent Decree.

For the purpose of avoiding litigation among the Parties, however, Simplot agrees to the requirements of this Consent Decree;

WHEREAS, the Parties agree that the United States' filing of the Complaint and entry into this Consent Decree constitute diligent prosecution by the United States, under Section 7002(b)(1)(B) of RCRA, 42 U.S.C. § 6972(b)(1)(B), and Section 326(e) of EPCRA, 42 U.S.C. § 11046(e), of all matters alleged in the Complaint and addressed by this Consent Decree through the date of lodging of this Consent Decree; and

WHEREAS, the Parties recognize, and the Court by entering this Consent Decree finds, that this Consent Decree has been negotiated by the Parties in good faith and will avoid litigation among the Parties and that this Consent Decree is fair, reasonable, and in the public interest;

NOW, THEREFORE, before the taking of any testimony, without the adjudication or admission of any issue of fact or law except as provided in Section I (Jurisdiction and Venue), below, and with the consent of the Parties,

IT IS HEREBY ADJUDGED, ORDERED, AND DECREED as follows:

I. JURISDICTION AND VENUE

- 1. This Court has jurisdiction over the subject matter of this action and over the Parties, pursuant to Section 3008(a) of RCRA, 42 U.S.C. § 6928(a); Section 325 of EPCRA, 42 U.S.C. § 11045; and 28 U.S.C. §§ 1331, 1332, 1345, and 1355. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b) and 1395(a); Section 3008(a) of RCRA, 42 U.S.C. § 6928(a); and Section 325(b)(3) and (c)(4) of EPCRA, 42 U.S.C. § 11045(b)(3), (c)(4), because the Facility is located in this judicial district and violations alleged in the Complaint are alleged to have occurred in this judicial district. For purposes of this Consent Decree, or any action to enforce this Consent Decree, the Parties consent to the Court's jurisdiction over this Consent Decree and any such action and over Simplot and further consent to venue in this judicial district.
- 2. Pursuant to Section 3008(a)(2) of RCRA, 42 U.S.C. § 6928(a)(2), notice of the commencement of this action has been given to the Wyoming DEQ.
- 3. For purposes of this Consent Decree only, Simplot agrees that the Complaint states claims upon which relief may be granted pursuant to Sections 3004 and 3005 of RCRA, 42 U.S.C. §§ 6924 and 6925, and implementing federal and state regulations; and Sections 304 and 313 of EPCRA, 42 U.S.C. §§ 11004 and 11023.

II. APPLICABILITY

- 4. The obligations of this Consent Decree apply to and are binding upon the United States and Simplot and any successors, assigns, or other entities or persons otherwise bound by law.
- 5. No transfer of ownership or operation of all or a portion of the Facility, whether in compliance with the procedures of this Paragraph or otherwise, shall relieve Simplot of its

obligation to ensure that the terms of this Consent Decree are implemented, unless: (1) the transferee agrees in writing to undertake the obligations required by this Consent Decree and to be substituted for Simplot as a Party to the Consent Decree and thus be bound by the terms thereof; and (2) the United States consents in writing to relieve Simplot of its obligations pursuant to Section XVII (Modification). At least thirty (30) Days prior to any proposed transfer of ownership, or of Simplot's obligations under this Consent Decree, or such other period agreed to by the Parties in writing Simplot shall: (i) provide a copy of this Consent Decree to the proposed transferee, if not previously provided; and (ii) simultaneously provide written notice of the prospective transfer, together with a copy of the proposed written agreement (subject to Section XIV (Notices) and as may otherwise be agreed in writing) transferring obligations to the transferee, to EPA and DOJ, in accordance with Section XIV (Notices), together with a request for approval. The United States' decision whether to approve the transferee's substitution for Simplot under this Consent Decree and what conditions may attend approval will take into account: (i) the status of the projects in Appendix 6 (Compliance Schedule); (ii) whether the transferee has or will have prior to the transfer the financial and technical capability to comply with this Consent Decree; and (iii) other factors that may be deemed relevant, including but not limited to the environmental compliance history of the proposed transferee and environmental management capabilities of the proposed transferee. Any transfer of ownership or operation of all or a portion of the Facility without complying with this Paragraph constitutes a violation of this Consent Decree.

6. The United States' refusal to approve, or approval with conditions for, the substitution of the transferee for Simplot under this Consent Decree shall be subject to dispute

resolution pursuant to Section X (Dispute Resolution), but any judicial review shall be conducted pursuant to Paragraph 71(a).

- 7. Simplot shall: (1) provide a copy of this Consent Decree to its President/CEO, Senior Vice Presidents, General Counsel, Vice President for Environmental & Regulatory Affairs and Senior Environmental Counsel, and to the Facility General Manager, Facility Environmental Manager, and Maintenance Manager of the Facility, and shall ensure that any employees and contractors whose duties might reasonably include compliance with any provision of this Consent Decree are made aware of this Consent Decree and specifically aware of the requirements of this Consent Decree that fall within such person's duties; (2) place an electronic version of the Consent Decree on its internal environmental website; and (3) post notice of the lodging of the Consent Decree and its availability in a location at the Facility where legal notices are posted. Simplot shall be responsible for ensuring that all employees and contractors involved in performing any Work pursuant to this Consent Decree perform such Work in compliance with the requirements of this Consent Decree.
- 8. In any action to enforce this Consent Decree, Simplot shall not raise as a defense the failure by any of its officers, directors, employees, agents, or contractors to take any actions necessary to comply with the provisions of this Consent Decree.

III. **DEFINITIONS**

9. Every term expressly defined by this Section shall have the meaning given that term herein, regardless of whether it is elsewhere defined in federal or state law. Every other term used in this Consent Decree that is also a term used under the following statutes and their corresponding regulations shall have the same meaning in this Consent Decree as such term has under these statutes and regulations: RCRA, 42 U.S.C. §§ 6901 – 6992k, and EPCRA, 42

U.S.C. §§ 11001 - 11050. In the case of a conflict between federal and state definitions, federal definitions shall control. For purposes of this Consent Decree, whenever terms defined below are used in this Consent Decree, such definitions shall apply. Additional definitions of terms used in Appendices 1-8 to this Consent Decree are set forth within those Appendices or in Appendix 9:

- (a) "3013 Order" shall mean the Administrative Order on Consent, Docket No. RCRA-08-2012-0004, entered into by Simplot and EPA on June 12, 2012, under RCRA Section 3013(a), 42 U.S.C. § 6934(a);
- (b) "Acid Value Recovery System" shall mean the Acid Value Recovery

 Tanks and wash solution system together with the Acid Value Recovery Units, pumps, piping
 and controls to enable Simplot to manage and recover the value of cleaning wastes or other
 materials, as described in Section VI (Compliance Projects) of Appendix 4 (Facility Report);
- (c) "Acid Value Recovery Tanks" shall mean the tanks and associated wastewater supply piping and return piping that enable the receiving and recirculating of cleaning wastes or other materials from Acid Value Recovery Units, as identified in Section VI (Compliance Projects) of Appendix 4 (Facility Report);
- (d) "Acid Value Recovery Tank Effluent" shall mean the output solution consisting of any or all inputs to Acid Value Recovery Tanks that are described in the Facility Report;
- (e) "Acid Value Recovery Units" comprise the Acid Value Recovery Tanks and those units in Downstream Operations from which cleaning wastes or other materials may be circulated to the Acid Value Recovery Tanks for management and/or recovery in designated units in Upstream Operations or Mixed-Use Units or reused as a cleaning solution following

completion of relevant compliance projects, as described in Section VI (Compliance Projects) of Appendix 4 (Facility Report);

- (f) "Bevill-Excluded Wastes" shall mean Phosphogypsum and Process Wastewater from phosphoric acid production through mineral processing, which, under 40 C.F.R. § 261.4(b)(7)(ii)(D), (P), are among the solid wastes excluded from hazardous waste regulation pursuant to the Bevill Exclusion;
- (g) "Complaint" shall mean the complaint filed by the United States in this action;
- (h) "Consent Decree" shall mean this Consent Decree and all Appendices identified in Section XXIV (Appendices) and attached hereto;
- (i) "Corrective Action Work" shall mean the activities described in Section IV of Appendix 1.A (Groundwater Requirements) and/or other activities taken at the express direction of EPA pursuant to its legal authorities to address a release into the environment of (1) the following products, including intermediates and wastes: phosphoric acid, sulfuric acid, and FSA; (2) SACS, including entrained wastes and solids; (3) Process Wastewater, including mixtures and entrained wastes and solids; and (4) Phosphogypsum Stack System Wastewater, including mixtures and entrained wastes and solids. Corrective Action Work does not include other activities to be taken at the direction of EPA pursuant to its residual authorities to address other releases of hazardous waste and/or hazardous constituents that may affect human health and the environment, which directions and activities will be undertaken outside of, and will not be subject to, this Consent Decree;
- (j) "Day" shall mean a calendar day unless expressly stated to be a business day. In computing any period of time under this Consent Decree, where the last day would fall

on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next business day;

- (k) "DOJ" shall mean the United States Department of Justice and any of its successor departments or agencies;
- (I) "Downstream Operations" shall mean all Facility operations involving the storage, management, transport, treatment, disposal, or further processing of the First Saleable Product, manufacturing operations that use the First Saleable Product as a feedstock, and certain FSA operations, except for units designated as a Mixed-Use Unit, Acid Value Recovery Units, or SPA Recovery Units, as described in the Facility Report;
- (m) "EPA" shall mean the United States Environmental Protection Agency and any of its successor departments or agencies;
 - (n) "Effective Date" is defined in Section XV (Effective Date);
- (o) "Facility" shall mean Simplot's manufacturing plants, Phosphogypsum

 Stack Systems, and such other contiguous or adjacent property owned and/or operated by

 Simplot, at the following location: approximately 5 miles southeast of Rock Springs, Wyoming,
 as delineated in Appendix 3 (Site Maps);
- (p) "Facility Report" shall mean the report dated May 14, 2020, and attached hereto as Appendix 4, prepared by the Parties and reflecting EPA's inspections of Simplot's Rock Springs Facility, which identifies the Facility's Upstream Operations and Downstream Operations, Acid Value Recovery System, SPA Recovery Units, Mixed-Use Units, compliance projects, and proposed future installations;
- (q) "Financial Assurance" shall mean a written demonstration of financial capability or establishment of a financial mechanism (i.e., third-party mechanism(s) for the

benefit of EPA in compliance with the terms of Appendix 2 (Financial Assurance)), to implement closure of the Phosphogypsum Stack System and long-term care, or any future Corrective Action Work if required under Paragraph 22 (Site Assessment, Groundwater Monitoring, and Corrective Action Work), in an amount at least equal to the cost estimate for said activities, and to provide for third-party liability as required under Appendix 2;

- (r) "First Saleable Product" shall mean:
- (1) Merchant Grade Acid (MGA), whether or not it is actually placed into commerce; or, if applicable,
- (2) any intermediate phosphoric acid product with a P₂O₅ content less than or equal to MGA that is diverted from further processing into MGA in order to be placed into commerce, further concentrated above 54% P₂O₅ (by weight), or used as a feedstock in manufacturing MAP/ DAP, SPA, purified acid, or other chemical manufacturing products, as alleged in the Complaint but denied by Simplot;
 - (s) "FSA" shall mean Fluorosilicic Acid (H₂SiF₆);
- (t) "Granulation" shall mean the process of converting liquid phosphoric acid, ammonia, secondary nutrients, and/or micronutrients into solid ammonium phosphate fertilizer in Downstream Operations;
- (u) "Granulation Recovery System" shall mean the Granulation recovery tanks and wash solution system together with the Granulation Recovery System Units, a sump, collection tank(s), pumps, and piping to enable Simplot to recover the value of cleaning wastes or other materials in the Granulation plant and recirculate the wash solution between the Granulation Recovery System Units and the Granulation Recovery System, and/or to consume

the wash solution in the Granulation plant, as specified and identified in Section VI.B.2 Project Operations of Appendix 4 (Facility Report);

- (v) "Granulation Recovery System Units" comprise the Granulation recovery tank(s) and those units in Granulation from which, as set forth in the Facility Report, cleaning wastes or other materials will be circulated to the Granulation recovery tanks for recovery or reuse as a cleaning solution in the Granulation plant or sent directly to Granulation for recovery;
 - (w) "Interest" shall mean the interest rate specified in 28 U.S.C. § 1961;
- (x) "Leachate" shall mean liquid or drainable pore water that has passed through or emerged from Phosphogypsum and which may be deposited or collected within the Phosphogypsum Stack System or in a seepage collection drain;
- (y) "MAP/DAP" shall mean monoammonium phosphate and diammonium phosphate, which are manufactured in Granulation;
- (z) "Merchant Grade Acid" ("MGA") shall mean phosphoric acid that is typically 52% to 54% (by weight) of P₂O₅ but may vary slightly across the phosphoric acid industry, manufactured from the direct reaction of phosphate rock and sulfuric acid and containing less than one percent (1%) solids content;
- (aa) "Mixed-Use Unit" shall mean a pollution control device, pipe, tank and/or other production, storage, or transportation unit specifically identified in either of Sections V or VIII of Appendix 4 (Facility Report) as serving both Upstream Operations and Downstream Operations;
- (bb) "Non-Hazardous Aqueous Cleaning Solution" ("NHACS") shall mean an aqueous solution, including without limitation fresh water, non-hazardous condensate, non-hazardous recycled water, and non-hazardous recovered groundwater, used for cleaning pipes,

tanks, or other equipment that, if evaluated as a solid waste before use, is not a RCRA listed or characteristic hazardous waste as defined by 40 C.F.R. Part 261, Subparts C and D;

- (cc) "Paragraph" shall mean a portion of this Consent Decree identified by an arabic numeral;
 - (dd) "Parties" shall mean the United States and Simplot;
- (ee) "Phosphogypsum" shall mean calcium sulfate and byproducts produced by the reaction of sulfuric acid with phosphate rock, or by the reaction of sulfuric acid with fluoride acids such as fluoride process condensate ("FPC") with phosphate rock, to produce phosphoric acid. Phosphogypsum is a solid waste within the definition of Section 1004(27) of RCRA, 42 U.S.C. § 6903(27);
- (ff) "Phosphogypsum Stack" shall mean any defined geographic area associated with a phosphoric acid production plant in which Phosphogypsum is managed, disposed of, or stored, other than within a fully enclosed building, container, or tank;
- (gg) "Phosphogypsum Stack System" shall mean the land-based geographic area identified in Appendix 3 (Site Maps), associated with a phosphoric acid production plant in which Phosphogypsum and Process Wastewater (and Leachate) are managed, disposed of, treated, or stored, together with all pumps, piping, ditches, drainage, conveyances, water control structures, collection pools, return (cooling/surge) ponds (including former return ponds), collection ponds, basins, auxiliary holding ponds, evaporation ponds, and any other collection or conveyance system associated with the transport of Phosphogypsum from the phosphoric acid plant to the Phosphogypsum Stack, its management at the Phosphogypsum Stack, and the Process Wastewater return to phosphoric acid production and the management (i.e., placement, storage, treatment, or disposal) of the Process Wastewater and Leachate. This definition

specifically includes toe drain systems and ditches and other Leachate collection systems, but does not include fully-enclosed buildings, containers, tanks, conveyances within the confines of the phosphoric acid or fertilizer production plant, or emergency diversion impoundments used for the temporary storage of Process Wastewater to avoid discharges in emergency circumstances caused by precipitation events of high volume or duration;

- (hh) "Phosphogypsum Stack System Wastewater" shall mean wastewater in the Phosphogypsum Stack System containing Bevill-Excluded Wastes commingled with hazardous wastes, as alleged in the Complaint but denied by Simplot;
- (ii) "Process Wastewater" shall mean process wastewater from phosphoric acid production. The following waste streams constitute process wastewater from phosphoric acid production: water from phosphoric acid production operations through concentration to the First Saleable Product; process wastewater generated from Upstream Operations that is used to transport Phosphogypsum to the Phosphogypsum Stack; Phosphogypsum Stack runoff (excluding non-contact runoff); process wastewater generated from any uranium recovery in phosphoric acid production; process wastewater from animal feed production (including defluorination but excluding ammoniated animal feed production) of phosphoric acid operations that qualify as mineral processing operations based on the definition of mineral processing that EPA finalized on September 1, 1989; and process wastewater generated from a superphosphate production process that involves the direct reaction of phosphate rock with dilute phosphoric acid that has a concentration less than Merchant Grade Acid [see 55 Fed. Reg. 2322, 2338, January 23, 1990];
- (jj) "RCRA Requirements" shall mean the requirements of RCRA Subtitle C, the applicable regulations in 40 C.F.R. Parts 260-270, and Chapter 20-3 W.A.C. §§ 260-68, 270;

- (kk) "Section" shall mean a portion of this Consent Decree identified by a roman numeral;
- (II) "Simplot" or "Defendants" shall mean J. R. Simplot Company and Simplot Phosphates, LLC;
- (mm) "SPA Recovery Units" shall mean the tanks, equipment, and transfer lines associated with the SPA process identified in Section V (Configuration Equipment Designations) of the Facility Report from which Simplot will recover the value of cleaning wastes or other materials as described in Section VI (Compliance Projects) of the Facility Report and in Appendix 5.A (Minimizing and Addressing Spills and Leaks);
- (nn) "Sulfuric Acid Cleaning Solution" (or "SACS") shall mean a solution of sulfuric acid and NHACS, Phosphogypsum Stack System Wastewater, and Acid Value Recovery System Effluent or Process Wastewater used for cleaning pipes, tanks, or other equipment;
- (00) "Sulfuric Acid Plants" shall mean the process units engaged in the production of sulfuric acid, denominated as "the Lurgi Plant" and "the MEC Plant," at the Facility;
- (pp) "Superphosphoric Acid" (or "SPA") shall mean liquid phosphoric acid (not a solid phosphate product such as granulated triple superphosphoric acid) generally with a P₂O₅ content greater than MGA, resulting from the concentration of wet process acid that does not involve the direct reaction of phosphate ore in such concentration operations;
- (qq) "United States" shall mean the United States of America, acting on behalf of EPA;
- (rr) "Upstream Operations" shall mean all phosphoric acid mineral processing operations resulting in the manufacture of the First Saleable Product; and

(ss) "Work" shall mean any activity that Simplot must perform to comply with the requirements of this Consent Decree, including Appendices.

IV. CIVIL PENALTY

- 10. Within thirty (30) Days after the Effective Date of this Consent Decree, Simplot shall pay the sum of \$775,000 as a civil penalty, together with Interest accruing from the date on which the Consent Decree is lodged with the Court, at the rate specified in 28 U.S.C. § 1961 as of the date of lodging.
- Simplot shall pay the civil penalty due by FedWire Electronic Funds Transfer 11. ("EFT") to the DOJ account, in accordance with written instructions to be provided by the Financial Litigation Unit ("FLU") of the U.S. Attorney's Office for the District of Wyoming to Simplot following the Effective Date. The payment instructions provided by the FLU will include a Consolidated Debt Collection System ("CDCS") number, which Simplot shall use to identify all payments required to be made in accordance with this Consent Decree. The FLU will provide the payment instructions to: Alan Prouty, Vice President Environmental & Regulatory Affairs, 1099 W. Front Street, Boise, ID 83702, (208) 780-7365, alan.prouty@simplot.com, on behalf of Simplot. Simplot may change the individual to receive payment instructions on its behalf by providing written notice of such change to DOJ and EPA in accordance with Section XIV (Notices). At the time of payment, Simplot shall send notice that payment has been made: (i) to DOJ via email or regular mail in accordance with Section XIV (Notices) of this Consent Decree; and (ii) to EPA via email at cinwd acctsreceivable@epa.gov or via regular mail at EPA Cincinnati Finance Office, 26 Martin Luther King Drive, Cincinnati, OH 45268. Such notice shall state that the payment is for the civil penalty owed pursuant to the

Consent Decree in *United States v. J. R. Simplot Company*, and shall reference the civil action number, CDCS Number, and DOJ case number 90-7-1-08388/8.

12. Simplot shall not deduct any penalties paid under this Consent Decree pursuant to this Section or Section VIII (Stipulated Penalties) in calculating its federal or state or local income tax.

V. COMPLIANCE REQUIREMENTS

RCRA

- in Appendix 5.A (Minimizing and Addressing Spills and Leaks) and Section VI (Compliance Projects) of Appendix 4 (Facility Report) to change its waste and materials management practices pursuant to the description and schedule set forth in Appendix 6 (RCRA Project Narrative and Compliance Schedule). For any wastes or materials generated by or managed in units that are identified in Section VI (Compliance Projects) of Appendix 4 (Facility Report) as part of the compliance projects set forth in Appendix 6 (RCRA Project Narrative and Compliance Schedule) requiring installation, construction, modification, shut down, or replacement to cease the commingling of hazardous wastes with Bevill-Excluded Wastes, as alleged in the Complaint but denied by Simplot, and for any wastes or materials that will be managed differently as a result of installing, constructing, modifying, shutting down, or replacing units as specified in Section VI (Compliance Projects) of Appendix 4 (Facility Report), Simplot's waste and materials management obligations under this Section V (Compliance Requirements) shall become effective upon completion of those compliance projects.
- 14. <u>Hazardous Waste Determinations</u>. Except as otherwise provided in this Paragraph, Simplot shall make a RCRA hazardous waste determination, pursuant to 40 C.F.R.

§ 262.11, of all solid wastes generated at the Facility and, if the wastes are hazardous, Simplot shall manage them in compliance with RCRA Requirements. The requirement to make a hazardous waste determination under this Paragraph does not apply to: (a) Bevill-Excluded Wastes, and (b) those wastes or other materials managed in compliance with Paragraphs 15-18, which allow certain wastes or other materials to be (i) input to Upstream Operations or Downstream Operations, (ii) managed via the Acid Value Recovery System, SPA Recovery Units, or the Granulation Recovery System, or (iii) managed with Bevill-Excluded Wastes.

- authorized by this Paragraph or Paragraphs 16-18 below, Simplot shall manage all wastes or other materials generated from Downstream Operations, if determined to be hazardous pursuant to Paragraph 14, in compliance with RCRA Requirements. This provision (subject to what is otherwise authorized by this Paragraph or Paragraphs 16-18 below) applies to all wastes or other materials from Downstream Operations, pollution control devices, cleaning wastes (liquids and solids), and spills and leaks from all Downstream Operations processes and units, regardless of the use of any Bevill-Excluded Wastes as influent to such Downstream Operations. If any units identified in the Facility Report as Mixed-Use Units are replaced, modified, or reconfigured after the date of the Facility Report such that they serve to manage, store, or transport materials from Downstream Operations that are not identified in the Facility Report as being associated with those units, they will be deemed to serve Downstream Operations, such that any wastes or other materials generated thereafter from such units will be subject to this Paragraph.
- (a) Simplot may re-use or recover certain wastes or other materials from Downstream Operations in Upstream Operations or Downstream Operations or via the Acid

Value Recovery System, SPA Recovery Units, or the Granulation Recovery System, as specifically documented in the Facility Report.

- (b) Simplot may input certain wastes or other materials to Upstream

 Operations or Downstream Operations directly or via the Acid Value Recovery System, SPA

 Recovery Units, or the Granulation Recovery System, as described in the Facility Report and in

 Appendix 5.A (Minimizing and Addressing Spills and Leaks). However, in the event of a

 process upset after commencement of operations of the Acid Value Recovery System, SPA

 Recovery Units, and/or the Granulation Recovery System that prevents the input of wastes or

 other materials from these systems or units into those Upstream Operations or Downstream

 Operations (as specified by the Facility Report), Simplot shall make a RCRA hazardous waste

 determination, pursuant to 40 C.F.R.§ 262.11, of the cleaning wastes or other materials generated

 from those systems or units affected by the process upset. Non-hazardous wastes or other

 materials from any such process upset may continue to be input to Upstream or Downstream

 Operations via the Acid Value Recovery System, SPA Recovery Units, or the Granulation

 Recovery Systems. If the wastes or other materials from any such process upset are hazardous,

 such wastes or other materials shall be managed in compliance with RCRA Requirements.
- 16. <u>Upstream Operations: Phosphoric Acid Scrubber Wastes</u>. Liquid wastes from air pollution control devices that are associated with Upstream Operations as identified in the Facility Report, or that are identified as Mixed-Use Units in the Facility Report, may be (a) input to Upstream Operations, or (b) treated, stored, managed, transported, or disposed of together with Bevill-Excluded Wastes, provided that (i) Simplot deposits such wastes only in a Phosphogypsum Stack System subject to and in compliance with the requirements of Appendix 1.A (Groundwater Requirements) and 1.B (Phosphogypsum Stack System Construction and

Operational Requirements) to this Consent Decree, and (ii) EPA has not made a determination that the Financial Assurance provided by Simplot no longer satisfies the requirements of this Consent Decree set forth in Paragraph 26 and Appendix 2 (Financial Assurance), pursuant to Paragraph 21 of Appendix 2.

- 17. Upstream Operations and Mixed-Use Units: Cleaning Wastes or Other Materials. Wastes or other materials generated from the use of Phosphogypsum Stack System Wastewater, Process Wastewater, or NHACS to clean pipes, tanks, process equipment, or other storage or transport units that: (a) are part of Upstream Operations; (b) serve to manage, store, or transport Bevill-Excluded Wastes that are alleged in the Complaint, but denied by Simplot, to have been historically commingled with hazardous waste; or (c) are identified as a Mixed-Use Unit in the Facility Report, may be (i) input to Upstream Operations, or (ii) treated, stored, managed, transported, and disposed of together with Bevill-Excluded Wastes, provided that Simplot deposits such wastes or other materials only in a Phosphogypsum Stack System subject to and in compliance with the requirements of Appendix 1.A (Groundwater Requirements) and 1.B (Phosphogypsum Stack System Construction and Operational Requirements) to this Consent Decree, and EPA has not made a determination that the Financial Assurance provided by Simplot no longer satisfies the requirements of this Consent Decree set forth in Paragraph 26 and Appendix 2 (Financial Assurance), pursuant to Paragraph 21 of Appendix 2, and further provided that Simplot manages the wastes or other materials in accordance with Appendix 5.A (Minimizing and Addressing Spills and Leaks).
- 18. <u>Acid Value Recovery System: Wastes or Other Materials Placed Directly in</u>
 Production Processes.

- (a) Prior to commencement of operations of the Acid Value Recovery

 System, as described in Section VI (Compliance Projects) of Appendix 4 (Facility Report),

 Simplot may continue to manage wastes or other materials generated from Upstream Operations,

 Mixed-Use Units, Acid Value Recovery Units, SPA Recovery Units, or units that serve to

 manage, store, or transport Bevill-Excluded Wastes as specifically documented in its

 "Consolidated Materials Management Practices" report dated April 17, 2020.
- (b) Following commencement of operations of the Acid Value Recovery

 System as described in Section VI (Compliance Projects) of Appendix 4 (Facility Report), the

 waste streams or other materials specified in Section IV of Appendix 4 (Facility Report) may be
 input to Upstream Operations and Downstream Operations as described in the Facility Report.
- 19. Spills and Leaks. Spills and leaks of all grades of phosphoric acid product, sulfuric acid, or other solid wastes from Upstream Operations or Mixed-Use Units are not Process Wastewater and shall be managed in accordance with Appendix 5.A (Minimizing and Addressing Spills and Leaks).

20. FSA.

- (a) FSA and wastewater carrying entrained solids from FSA production, both of which are part of Downstream Operations, may be managed as described in Section VI (Compliance Projects) of Appendix 4 (Facility Report).
- (b) Hazardous waste solids not entrained in cleaning solutions but instead mechanically removed from FSA production (such as filtration residue, tank bottoms, and filter bags) shall be managed in compliance with the Facility Report and the Best Management Practices (BMP) Plan for Minimizing and Addressing Spills and Leaks, set forth in Appendices 4 and 5.A, respectively.

- (c) Wastes generated from FSA production that are not subject to Paragraphs 20(a) and (b) shall be managed in compliance with RCRA Requirements.
- 21. <u>Sulfuric Acid Plants</u>. Simplot shall manage hazardous wastes generated at the Facility's Sulfuric Acid Plants in accordance with applicable law.
- 22. <u>Site Assessment, Groundwater Monitoring, and Corrective Action Work.</u> Simplot has already completed and submitted to the United States an interim site assessment report, "Groundwater Investigation Summary Report" (dated April 2016), that details the scope and results of investigations conducted at the Facility as part of Simplot's compliance with the 3013 Order. No Corrective Action Work is required to address the findings of the interim site assessment report. Simplot shall conduct groundwater monitoring and reporting pursuant to Section 3.0-4.0 of the "Groundwater Monitoring Plan October 2018" in Attachment A to Appendix 1.A (Groundwater Requirements). In accordance with Appendix 1.A, based on the results of future groundwater monitoring, Simplot shall notify EPA of any exceedance of Wyoming groundwater standards and any Wyoming-ordered corrective or remedial actions, and perform Corrective Action Work if it is required.
- 23. <u>Phosphogypsum Stack System</u>. Simplot shall comply with all requirements of Appendix 1 (Operating and Closure Requirements), which requirements are set forth specifically in Appendix 1.A through 1.E.
- 24. <u>Inspections and Integrity of Tanks, Sumps, and Secondary Containment</u>. Process liquids (aqueous solution of phosphate and sulfate) routed within the Facility shall be managed in

accordance with the scope and provisions of Appendix 5.B (Inspections and Integrity of Tanks, Sumps, and Secondary Containment).

- 25. <u>Completed Activities</u>. Simplot has already completed the following activities in compliance with the below referenced Consent Decree Paragraphs or Appendices/Attachments to the Consent Decree:
- (a) <u>Liners</u>. The Parties agree that the Facility's current Phosphogypsum Stack
 System liner meets the liner requirements of Appendix 1.B (Phosphogypsum Stack System
 Construction and Operational Requirements).
- (b) <u>Liner Equivalency</u>. The Parties agree that for a proposed expansion of the Facility's Phosphogypsum Stack System, Simplot's proposed HDPE geomembrane liner in contact with sedimented gypsum placed in slurry form, as documented in Appendix 7 (Alternative Liner demonstration), will provide a degree of protection of human health and the environment at least equivalent to the liner requirements of Appendix 1.B (Phosphogypsum Stack System Construction and Operational Requirements), provided that Simplot operates that liner system within its design limits and maintains it in accordance with Appendix 1.B, Sections VI and VIII.
- (c) <u>Granulation Recovery System and Granulation Re-slurry System</u>. The Parties agree that Simplot has already constructed and is operating a Granulation Recovery System and a Granulation re-slurry system in its Granulation plant as described and in accordance with the Facility Report.
- 26. <u>Financial Assurance</u>. Simplot shall secure and maintain Financial Assurance for the benefit of EPA pursuant to the requirements of Appendix 2 (Financial Assurance) of this Consent Decree, in order to ensure coverage for: (a) third-party liability, as described in

Appendix 2; (b) Phosphogypsum Stack System Closure (including long-term care) as required under Appendix 1.C (Closure of Phosphogypsum Stacks/Stack Systems); and (c) Corrective Action Work, if required pursuant to Appendix 1.A (Groundwater Requirements), in which event the Parties agree to modify Appendix 2 to include this requirement. Simplot's inability to secure and/or maintain adequate Financial Assurance shall in no way excuse performance of the Work or any other requirement of this Consent Decree.

27. In addition to the Financial Assurance information included in the reports required pursuant to Section VII (Reporting Requirements) of this Consent Decree, Simplot shall provide to EPA, upon request, any information or reports that Plaintiff is authorized to request pursuant to Section 3007 of RCRA, 40 C.F.R. Part 264, Subpart H, or any other statutory or regulatory information gathering authorities regarding financial mechanism(s) provided by Simplot to meet its obligation for Financial Assurance, and the financial institution or guarantor providing the financial mechanism(s) to secure Simplot's obligations, pursuant to Appendix 2.

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28. Within sixty (60) Days after the Effective Date, Simplot shall revise and resubmit its Form R reports for the Facility required pursuant to 40 C.F.R. § 372.30 for each of the reporting years 2004 through 2013, such that those reports incorporate reasonable estimates of the quantities of hazardous substances manufactured, processed, and/or released at the Facility in accordance with 40 C.F.R. Part 372.

Other Compliance Requirements

29. <u>EPA Review of Submissions</u>. All work plans, reports, and other documents that are developed and submitted to EPA for approval pursuant to this Consent Decree shall be complete and technically adequate. After review of any work plan, report, or other document

that is required to be submitted, or revised and resubmitted, to EPA for approval pursuant to this Consent Decree, EPA shall in writing: (a) approve the submission; (b) approve the submission upon specified conditions; (c) approve part of the submission and disapprove the remainder; or (d) disapprove the submission. In the event of disapproval of any portion of the submission, EPA shall include a statement of the reasons for such disapproval in its response. Plaintiff's receipt or acceptance of information or notice, or approval of a submittal, does not bind Plaintiff to the factual assertions and conclusions of the information, notice, or submittal.

- 30. If the submission is approved pursuant to Paragraph 29(a), Simplot shall take all actions required by the work plan, report, or other document, in accordance with the schedules and requirements of the work plan, report, or other document, as approved. If the submission is conditionally approved or approved only in part, pursuant to Paragraph 29(b) or (c), Simplot shall, upon written direction from EPA, take all actions required by the approved work plan, report, or other document that EPA determines are technically severable from any disapproved portions, subject to Simplot's right to dispute only the specified conditions, the disapproval, or the determination of the technical severability of portions of the submission under Section X (Dispute Resolution).
- 31. If the submission is disapproved in whole or in part pursuant to Paragraph 29(c) or (d), Simplot shall, within sixty (60) Days or such other time as the Parties agree to in writing, correct all deficiencies and resubmit the plan, report, or other document, or disapproved portion thereof, for approval, in accordance with the preceding Paragraphs. If the submission has been previously disapproved, EPA may impose an earlier due date for resubmission, but not less than fourteen (14) Days. If the resubmission is approved in whole or in part, Simplot shall proceed in accordance with the preceding Paragraph.

- 32. Any stipulated penalties applicable to the original submission, as provided in Section VIII (Stipulated Penalties), shall accrue during the sixty (60) Day period or other agreed upon period, but shall not be payable unless the resubmission is untimely or is disapproved in whole or in part; provided that, if the original submission was so deficient as to constitute a material breach of Simplot's obligations under this Consent Decree, the stipulated penalties applicable to the original submission shall be due and payable notwithstanding any subsequent resubmission.
- disapproved in whole or in part, EPA may again require Simplot to correct any deficiencies in accordance with the preceding Paragraphs, may itself correct any deficiencies, or may finally disapprove the submission, subject to Simplot's right to invoke dispute resolution under Section X (Dispute Resolution) and EPA's right to seek stipulated penalties under Section VIII (Stipulated Penalties). If the resubmission is approved or corrected in whole or in part, Simplot shall proceed in accordance with Paragraph 30. In the event any work plan, report, or other document that was previously approved by EPA needs to be modified because of (a) material or substantial alterations or additions to the Facility or its operations, (b) the receipt of information that would have justified changes to the submission had the information been available at the time of approval, or (c) new statutory requirements or regulations, EPA may so notify Simplot and require the work plan, report, or other document to be revised in accordance with EPA direction and resubmitted to EPA for approval.

34. Correction of Non-Compliance.

(a) If Simplot determines, with or without notice from EPA, that it is violating, or will violate, any requirement of Section V (Compliance Requirements) other than

those set forth in Paragraph 26 (Financial Assurance), Simplot shall submit its report of the violation pursuant to Section VII (Reporting Requirements), and shall subsequently implement a correction plan to rectify the violation ("Correction Plan"), if it has not already corrected the violation by the time of the report. The Correction Plan shall include a schedule for correcting the violation.

In the event of a violation subject to Paragraph 34(a), Simplot nevertheless (b) shall be considered to be in compliance with this Consent Decree for purposes of: (1) continuing to manage those wastes or other materials that Paragraphs 15 through 18 allow to be input to Upstream Operations or Downstream Operations directly or via the Acid Value Recovery System, SPA Recovery Units, Granulation Recovery System Units, or together with Bevill-Excluded Wastes; and (2) assessing Simplot's compliance with this Consent Decree under Paragraphs 36, 79, 80, and 81, provided that: (i) if Simplot deposits wastes or other materials governed by Paragraphs 15-18 in a Phosphogypsum Stack System, it does so only in a Phosphogypsum Stack System subject to and in compliance with the Phosphogypsum Stack System Requirements set forth in Paragraph 23; and (ii) Simplot timely implements and completes its Correction Plan, or refers an allegation of non-compliance with Section V (Compliance Requirements) or with a Correction Plan to dispute resolution pursuant to Section X (Dispute Resolution) and either prevails in dispute resolution or satisfactorily complies with an EPA or judicial directive to correct any instances of non-compliance (collectively, "Continuing Compliance Criteria"). Nothing in this Paragraph shall be construed as EPA approval of Simplot's correction efforts pursuant to this Paragraph, as a waiver of stipulated penalties for the violation pursuant to Section VIII (Stipulated Penalties), or as limiting the rights reserved by Plaintiff under Section VI (Work Takeover) or Paragraph 82. EPA reserves the right to require,

upon written request, that a Correction Plan be submitted to EPA for approval in accordance with Paragraphs 29 through 33. Simplot's compliance with this Paragraph is without prejudice to its rights under Section IX (Force Majeure) and Section X (Dispute Resolution).

- 35. Permits. Where any compliance obligation under this Section requires Simplot to obtain a federal, state, or local permit, or other form of approval, Simplot shall submit timely and complete applications and take such actions as are necessary to obtain all such permits or approvals. A request for supplementation by the permitting agency does not constitute a notice or finding that an application was incomplete for the purpose of this Paragraph unless the permitting agency determines that the original application was so deficient as to constitute a material breach of Simplot's obligations under this Consent Decree. Simplot may seek relief under the provisions of Section IX (Force Majeure) for any delay in the performance of any such obligation resulting from a failure to obtain, or a delay in obtaining, any permit or approval required to fulfill such obligation, if Simplot has submitted timely and complete applications and has taken such actions as are necessary to timely obtain all such permits or approvals.
- Requirements) or the Continuing Compliance Criteria set forth in Paragraph 34(b) at the Facility, the Facility shall not be required to operate as a Treatment Storage and Disposal Facility pursuant to Section 3005 of RCRA and its implementing federal and/or state regulations, with respect to: (1) the treatment, storage, transport, management, and disposal of Bevill-Excluded Wastes that have been commingled with hazardous wastes or otherwise managed in violation of law, as alleged in the Complaint but denied by Simplot, prior to the lodging of this Consent Decree, or, as applicable, prior to completing the compliance projects set forth in Appendix 6 (RCRA Project Narrative and Compliance Schedule) as provided by Paragraph 13, or during

timely implementation of a Correction Plan as set forth in Paragraph 34; and (2) wastes or other materials that Paragraphs 15 through 18 allow to be input to Upstream Operations or Downstream Operations, or managed via the Acid Value Recovery System, SPA Recovery Units, Granulation Recovery System Units, or together with Bevill-Excluded Wastes.

VI. WORK TAKEOVER

- 37. In the event EPA determines that Simplot: (a) has ceased implementation of any portion of the Work; or (b) is seriously or repeatedly deficient or late in its performance of the Work; or (c) is implementing the Work in a manner that may cause an endangerment to human health or the environment, EPA, with the joint approval of the EPA Region 8 Regional Administrator and the Assistant Administrator for the EPA Office of Enforcement and Compliance Assurance, may issue a written notice ("Work Takeover Notice") to Simplot. Any Work Takeover Notice issued by EPA shall specify the grounds upon which such notice was issued and shall provide Simplot a period of thirty (30) Days, or such additional time that may reasonably be needed, within which to remedy the circumstances giving rise to EPA's issuance of such notice.
- 38. If, after expiration of the period specified in Paragraph 37, the Work Takeover Notice has not been withdrawn by EPA and Simplot has not remedied to EPA's satisfaction the circumstances giving rise to EPA's issuance of the Work Takeover Notice, EPA at any time thereafter may undertake takeover of Work by assuming and/or directing the performance of, seeking the appointment of a receiver to direct the performance of, or accessing Financial Assurance to finance the performance of, all or any portions of the Work that EPA deems necessary to correct the violations or conditions that triggered the Work Takeover Notice pursuant to Paragraph 37. In either case, EPA may utilize Financial Assurance for closure of the

Phosphogypsum Stack System, and/or long-term care, as authorized by this Consent Decree, for any Work covered by such Financial Assurance. EPA shall notify Simplot in writing if EPA determines that takeover of Work is warranted under this Section of the Consent Decree. In the event that EPA seeks to appoint a receiver to direct the performance of the Work, Simplot shall not oppose such appointment on grounds other than lack of competence or conflict of interest, but shall retain its right to challenge the underlying takeover of Work in dispute resolution, as set forth in the following Paragraph and Section X (Dispute Resolution). In implementing any takeover of Work, EPA shall make reasonable efforts not to interfere with Facility operations not directly affected by the conditions that triggered the takeover of Work.

- 39. In the event that Simplot invokes Section X (Dispute Resolution) with respect to EPA's takeover of Work and/or its selection of options set forth in Paragraph 38 (the latter of which, if disputed, must be disputed together with the underlying takeover of Work and pursuant to Paragraph 71(a)), EPA during the pendency of any such dispute may, in its unreviewable discretion, commence and continue a takeover of Work until the earlier of: (a) the date that Simplot remedies, to EPA's satisfaction, the circumstances giving rise to issuance of the Work Takeover Notice; or (b) the date that a final decision is rendered in accordance with Section X (Dispute Resolution) of the Consent Decree requiring EPA to terminate such takeover of Work.
- 40. After commencement and for the duration of any takeover of Work, EPA or any appointed receiver shall have the immediate benefit of any Financial Assurance provided pursuant to Paragraph 26 and Appendix 2 (Financial Assurance) of this Consent Decree to implement the Work. If EPA or any appointed receiver are unable to access the Financial Assurance, or the Work addressed by the takeover of Work is not covered by Financial Assurance, then any unreimbursed costs incurred by EPA in connection with the takeover of

Work shall be considered a financial obligation owed by Simplot to the United States and collectible in an action to enforce this Consent Decree. Nothing in this Paragraph shall be construed to relieve Simplot of its obligation to provide adequate Financial Assurance pursuant to Appendix 2. In the event that it is determined in dispute resolution that the takeover of Work was not warranted, any unexpended funds in a stand-by trust that originated from a letter of credit, surety bond, or corporate guarantee shall be used to restore any pre-existing trust fund to the pre-takeover of Work level, if necessary, and any balance of unexpended funds shall be released and used to re-establish the original financial mechanism(s).

VII. REPORTING REQUIREMENTS

41. If Simplot determines that it has violated or will violate any requirement of this Consent Decree, Simplot shall (unless otherwise directed by EPA) notify EPA of such violation and its likely duration in writing, within twelve (12) Days of the date Simplot first becomes aware of the violation, with an explanation of the likely cause of the violation and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of the violation cannot be fully explained at the time the report is due, Simplot shall so state in the report. Simplot shall investigate the cause of the violation and shall then submit an amendment to the report, including a full explanation of any identifiable cause(s) of the violation, within thirty (30) Days of the date Simplot becomes aware of the violation. Nothing in this Paragraph or Paragraphs 42 and 43 relieves Simplot of its obligation to provide the notice required by Section IX (Force Majeure).

42. Periodic Reporting.

(a) Within forty-five (45) Days after the end of each calendar quarter after lodging of this Consent Decree, until the quarter ending after the two (2) year anniversary of the

date of lodging, Simplot shall submit to EPA a report for the preceding calendar quarter (quarters shall end on March 31, June 30, September 30, and December 31 of each year) that shall include:

(i) the status of any construction or compliance measures; (ii) completion of milestones; (iii) problems encountered or anticipated, together with implemented or proposed solutions; (iv) status of permit applications; (v) status of plans for closure and long-term care; and status of permit application, as applicable, for closure or long-term care; (vi) operation and maintenance difficulties or concerns; (vii) status of Financial Assurance; (viii) reports to state agencies concerning matters enumerated in this Paragraph; (ix) a description of any violation of the requirements of this Consent Decree reported under Paragraph 41 and an explanation of the likely cause of such violation and the remedial steps taken, or to be taken, to prevent or minimize such violation; and (x) identification of any confirmed "critical condition" as defined and reported to EPA pursuant to Appendix 1.D (Critical Conditions and Temporary Measures).

- (b) Thereafter (following the expiration of the period specified in Paragraph 42(a)), and for a period of two (2) years, Simplot shall submit such reports to EPA on a semi-annual basis.
- (c) Thereafter (following the expiration of the period specified in Paragraph 42(b)), Simplot shall submit such reports annually until such time as Simplot submits the final closure application required for the Facility pursuant to Appendix 1.C (Closure of Phosphogypsum Stacks/Stack Systems) and 1.E (Phosphogypsum Stack System Permanent Closure Application). Simplot shall submit its next report within one hundred eighty (180) Days after submission of the closure application, and annually thereafter until this Consent Decree is terminated.

- Simplot's performance under this Consent Decree or the performance of its Facility, may pose an immediate threat to the public health or welfare or the environment, Simplot shall, unless otherwise directed, notify EPA as per Section XIV (Notices), orally or by electronic or facsimile transmission as soon as possible, but no later than twenty-four (24) hours after Simplot first knew of the violation or event, and shall comply with the requirements of Appendix 1.D (Critical Conditions and Temporary Measures). Any violation of this notice requirement shall be deemed to terminate on the date that EPA has received actual notice of the violation or event either based on notice from Simplot or by other means. This notice requirement does not relieve Simplot of its obligation to comply with any federal and state laws applicable to the violation or event. This notice requirement is in addition to the requirement to provide notice of a violation of this Consent Decree set forth in Paragraphs 41 and 42.
- 44. All reports shall be submitted to the persons designated to receive notices for the Plaintiff in Section XIV (Notices) of this Consent Decree.
- 45. Each report submitted by Simplot under this Section shall be signed by a responsible corporate official of Simplot (as defined in 40 C.F.R. § 270.11(a)) and shall include the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

This certification requirement does not apply to emergency notifications where compliance would be impractical.

- 46. The reporting requirements of this Consent Decree do not relieve Simplot of any reporting obligations required by RCRA Requirements, or by any other federal, state, or local law, regulation, permit, or other requirement. However, the reporting requirements of this Consent Decree shall not require Simplot to resubmit any report, plan, or information submitted by Simplot to EPA prior to the Effective Date of this Consent Decree.
- 47. Any information provided pursuant to this Consent Decree may be used by the Plaintiff in any proceeding to enforce the provisions of this Consent Decree, subject to Paragraph 77 and as otherwise permitted by law.

VIII. STIPULATED PENALTIES

- 48. Simplot shall be liable for stipulated penalties to the United States for violations of this Consent Decree as specified below, unless otherwise expressly provided for in this Consent Decree or excused under Section IX (Force Majeure). A violation includes failing to perform any obligation required by the terms of this Consent Decree, including any work plan or schedule approved under this Consent Decree, according to all applicable requirements of this Consent Decree and within the specified time schedules established by or approved under this Consent Decree.
- 49. <u>Civil Penalty</u>. If Simplot fails to pay the civil penalty required to be paid under Section IV (Civil Penalty) when due, Simplot shall pay a stipulated penalty of \$1,000 per Day for each Day that the payment is late for the first ten (10) Days, together with Interest.

 Thereafter, Simplot shall pay \$3,000 per Day for each Day that the payment is late, with Interest.

 Late payment of the civil penalty shall be made in accordance with Section IV (Civil Penalty),

Paragraph 11. Stipulated penalties for late payment of the civil penalty shall be paid in accordance with Paragraphs 52, 53, 55, and 56. All transmittal correspondence shall state that any such payment is for late payment of the civil penalty due under this Consent Decree, or for stipulated penalties for late payment, as applicable, and shall include the identifying information set forth in Paragraph 11.

50. <u>Compliance Requirements</u>. The following stipulated penalties shall accrue per violation per Day for each violation of the requirements identified in Section V (Compliance Requirements):

Penalty Per Violation Per Day	Period of Noncompliance
\$1,000	1st through 14th Day
\$2,000	15th through 30th Day
\$3,000	31st Day and beyond

51. Reporting and Notice Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the requirements of Section VII (Reporting Requirements), and Paragraph 91 of Section XIV (Notices):

Penalty Per Violation Per Day	Period of Noncompliance
\$ 750	1st through 14th Day
\$1,000	15th through 30th Day
\$2,000	31st Day and beyond

52. Subject to the provisions of Paragraph 32, and except as otherwise specified in Paragraph 55(b), stipulated penalties under this Section shall begin to accrue on the Day after performance is due or on the Day a violation occurs, whichever is applicable, and shall continue to accrue until performance is satisfactorily completed or until the violation ceases. Stipulated penalties shall accrue simultaneously for separate violations of this Consent Decree.

- 53. Simplot shall pay stipulated penalties to the United States within twelve (12) Days of a written demand by the Plaintiff, subject to Simplot's right to invoke dispute resolution in accordance with Section X (Dispute Resolution).
- 54. The Plaintiff, may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due to the Plaintiff under this Consent Decree.
- 55. Stipulated penalties shall continue to accrue, as provided in Paragraph 52, during any dispute resolution, but need not be paid until the following:
- (a) If the dispute is resolved by agreement of the Parties or by a decision of EPA that is not subject to judicial review or appealed to the Court, Simplot shall pay accrued penalties determined to be owing, together with Interest, to the United States within thirty (30) Days of the effective date of the agreement or the receipt of the United States' decision.
- (b) If the dispute is appealed to the Court and the United States prevails in whole or in part, Simplot shall pay all accrued penalties determined by the Court to be owing, together with Interest, within sixty (60) Days of receiving the final Court decision.
- 56. Simplot shall pay stipulated penalties owing to the United States in the manner set forth and with the confirmation notices required by Paragraph 11, except that the transmittal letter shall state that the payment is for stipulated penalties and shall state for which violation(s) the penalties are being paid.
- 57. Simplot shall not deduct stipulated penalties paid under this Section in calculating its state and federal income tax.
- 58. If Simplot fails to pay stipulated penalties according to the terms of this Consent Decree, Simplot shall be liable for Interest on such penalties, as provided for in 28 U.S.C. § 1961, accruing as of the date payment became due. Nothing in this Paragraph shall be

construed to limit the United States from seeking any remedy otherwise provided by law for Simplot's failure to pay any stipulated penalties.

59. Stipulated penalties are not the United States' exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XII (Effect of Settlement/ Reservation of Rights), the stipulated penalties provided for in this Consent Decree shall be in addition to any other rights, remedies, or sanctions available to the United States for Simplot's violation of this Consent Decree or applicable law. Where a violation of this Consent Decree is also a violation of relevant statutory or regulatory requirements, Simplot shall be allowed a credit for any stipulated penalties paid against any statutory penalties imposed for such violation.

IX. FORCE MAJEURE

- arising from causes beyond the control of Simplot, of any entity controlled by Simplot, or of Simplot's contractors that delays or prevents the performance of any obligation under this Consent Decree despite Simplot's best efforts to fulfill the obligation. The requirement that Simplot exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure and best efforts to address the effects of any potential force majeure (a) as it is occurring and (b) following the potential force majeure such that the delay and any adverse effects of the delay are minimized to the greatest extent possible. Force majeure does not include Simplot's financial inability to perform any obligation under this Consent Decree.
- 61. If any event occurs or has occurred that may delay the performance of any obligation under this Consent Decree, whether or not caused by a force majeure event, Simplot shall provide notice to EPA orally or by electronic or facsimile transmission as soon as possible, as provided in Section XIV (Notices), but not later than seven (7) Days after the time when

Simplot first knew that the event might cause a delay. Within ten (10) Days thereafter, Simplot shall provide written notice to EPA with an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Simplot's rationale for attributing such delay to a force majeure event if it intends to assert such a claim; and a statement as to whether, in the opinion of Simplot, such event may cause or contribute to an endangerment to public health, welfare, or the environment. Simplot shall include with any notice all available documentation supporting its claim that the delay was attributable to a force majeure event. Simplot shall be deemed to know of any circumstance of which Simplot, any entity controlled by Simplot, or Simplot's contractors knew or reasonably should have known. Failure to comply with the above requirements regarding an event shall preclude Simplot from asserting any claim of force majeure regarding that event, provided, however, that if EPA, despite the late notice, is able to assess to its satisfaction under Paragraphs 60 and 61 whether the event is a force majeure and whether Simplot has exercised its best efforts, EPA may, in its unreviewable discretion, excuse in writing Simplot's failure to submit timely notices under this Paragraph.

62. If EPA agrees that the delay or anticipated delay is attributable to a force majeure event, the time for performance of the obligations under this Consent Decree that are affected by the force majeure event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the force majeure event shall not, of itself, extend the time for performance of any other obligation. If EPA agrees that the delay is attributable to a force majeure event, EPA will notify Simplot in

writing of the length of the extension, if any, for performance of the obligations affected by the force majeure event.

- 63. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, EPA will notify Simplot in writing of its decision.
- 64. If Simplot elects to invoke the dispute resolution procedures set forth in Section X (Dispute Resolution), it shall do so no later than fifteen (15) Days after receipt of EPA's notice. In any such proceeding, Simplot shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Simplot complied with the requirements of Paragraphs 60 and 61. If Simplot carries this burden, the delay at issue shall not constitute a violation by Simplot of the affected obligation of this Consent Decree identified to EPA and the Court.

X. DISPUTE RESOLUTION

- 65. Unless otherwise expressly provided for in this Consent Decree, the dispute resolution procedures of this Section shall be the exclusive mechanism to resolve all disputes arising under or with respect to this Consent Decree. Simplot's failure to seek resolution of a disputed issue under this Section shall preclude Simplot from raising any such issue as a defense to an action by the United States to enforce any obligation of Simplot arising under this Consent Decree.
- 66. <u>Informal Dispute Resolution</u>. Any dispute subject to dispute resolution under this Consent Decree shall first be the subject of informal negotiations, which may include any third-party assisted, non-binding alternative dispute resolution process agreeable to the Parties. If

Simplot elects to invoke dispute resolution, it shall do so by sending a written Notice of Dispute to DOJ and EPA within thirty (30) Days after Simplot's receipt of the decision Simplot disputes. The dispute shall be considered to have arisen when Simplot sends DOJ and EPA a written Notice of Dispute. Such Notice of Dispute shall state clearly the matter in dispute. The period of informal negotiations shall not exceed twenty (20) Days from the date that the dispute arises unless that period is modified by written agreement between EPA and Simplot. If the Parties cannot resolve a dispute by informal negotiations, then the position of the United States shall be considered binding, unless Simplot invokes formal dispute resolution procedures as provided in the following Paragraph.

- 67. <u>Formal Dispute Resolution</u>. If Simplot elects to invoke formal dispute resolution, Simplot shall, within thirty (30) Days after the conclusion of the informal negotiation period, send to DOJ and EPA a written Statement of Position regarding the matter in dispute. The Statement of Position shall include, but need not be limited to, any factual data, analysis, or opinion supporting Simplot's position and any supporting documentation relied upon by Simplot.
- 68. The United States shall serve its Statement of Position within forty-five (45) Days of receipt of Simplot's Statement of Position, or of any supplemental statement the United States may request from Simplot. The United States' Statement of Position shall include or clearly reference, but need not be limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the United States. The United States' Statement of Position shall be binding on Simplot, unless Simplot files a motion for judicial review of the dispute in accordance with the following Paragraph.
- 69. Simplot may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XIV (Notices), a motion requesting

judicial resolution of the dispute. The motion must be filed within thirty (30) Days of receipt of the United States' Statement of Position pursuant to the preceding Paragraph. The motion shall contain a written statement of Simplot's position on the matter in dispute, including any supporting factual data, analysis, opinion, or documentation, and shall set forth the relief requested and any schedule within which the dispute must be resolved for orderly implementation of the Consent Decree.

70. The United States shall respond to Simplot's motion within the time period allowed by the Local Rules of this Court. Simplot may file a reply memorandum to the extent permitted by the Local Rules.

71. Standard of Review.

- brought under this Section pertaining to the adequacy or appropriateness of plans, procedures to implement plans, schedules, or any other items requiring approval by EPA under this Consent Decree; the adequacy of the Work performed pursuant to this Consent Decree; and all other disputes that are accorded review on the administrative record under applicable principles of administrative law, EPA shall compile an administrative record of the dispute containing all Statements of Position, including supporting documentation and referenced data or information, and Simplot shall have the burden of demonstrating, based on the administrative record, that the position of the United States is arbitrary and capricious or otherwise not in accordance with law.
- (b) Except as provided in Paragraph 94, in any other dispute brought under this Section, Simplot shall bear the burden of demonstrating that its position complies with and furthers the objectives of this Consent Decree, and that Simplot is entitled to relief under applicable principles of law.

72. The invocation of dispute resolution procedures under this Section shall not, by itself, extend, postpone, or affect in any way any obligation of Simplot under this Consent Decree, unless and until final resolution of the dispute so provides or unless ordered by the Court. Stipulated penalties with respect to the disputed matter shall continue to accrue from the first Day of noncompliance, but payment shall be stayed pending resolution of the dispute as provided in Paragraph 55. If Simplot does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section VIII (Stipulated Penalties).

XI. INFORMATION COLLECTION AND RETENTION

- 73. The United States and its representatives, including attorneys, contractors, and consultants, shall have the right of entry into Simplot's Facility at all reasonable times, upon presentation of appropriate identification, to:
 - (a) monitor the progress of activities required under this Consent Decree;
- (b) verify any data or information submitted to the United States in accordance with the terms of this Consent Decree;
- (c) obtain samples and, upon request, splits of any samples taken by Simplot or its representatives, contractors, or consultants;
 - (d) obtain documentary evidence, including photographs and similar data;
 - (e) assess Simplot's compliance with this Consent Decree; and
- (f) conduct, direct, or review Work pursuant to Section VI (Work Takeover).

 Upon request, EPA and its authorized representatives shall provide Simplot splits of any samples taken by EPA or its authorized representatives.
- 74. Simplot shall retain, and shall require its contractors and agents to preserve, all non-identical copies of all documents, records, or other information that are in the possession or

agents, and that relate to Simplot's performance of its obligations under this Consent Decree.

The documents, records, or other information subject to the requirements of this Paragraph are those in electronic form or otherwise and include any documents, records, emails, data, or other information (a) underlying the submission of any report required pursuant to Section VII (Reporting Requirements), and (b) relating to Simplot's adherence to the requirements associated with the management of waste or other materials allowed under Paragraphs 15 through 18. This information retention requirement shall apply for a period of five (5) years after the creation of any document, record, or other information subject to this Paragraph, and shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information retention period, upon request by the United States, Simplot shall provide copies of any documents, records, or other information required to be maintained under this Paragraph, subject to the right under Paragraph 76 to claim privilege.

- 75. At the conclusion of the information retention period provided in the preceding Paragraph, Simplot shall notify the United States at least ninety (90) Days prior to the destruction of any documents, records, or other information subject to the requirements of the preceding Paragraph. Unless otherwise directed by EPA, Simplot shall require its contractors and agents to provide the same notice to Simplot with respect to their materials, and shall promptly relay any such notices to the United States. Upon request by the United States, Simplot shall deliver any such documents, records, or other information to EPA. Simplot shall not dispose of materials following the expiration of its five (5) year retention period more often than once a year.
- 76. In connection with any request for documents, records, or other information pursuant to this Consent Decree, Simplot may assert that certain documents, records, or other

information are privileged under the attorney client privilege or any other privilege recognized by federal law, provided that Simplot shall not assert a legal privilege for any data, records, or information (excluding legal advice) generated or received in connection with Simplot's obligations pursuant to the requirements of this Consent Decree. If Simplot asserts a privilege, it shall provide the following: (a) the title of the document, record, or information; (b) the date of the document, record, or information; (c) the name and title of each author of the document, record, or information; (d) the name and title of each addressee and recipient; (e) a description of the subject of the document, record, or information; and (f) the privilege asserted by Simplot. If the Plaintiff and Simplot disagree as to whether a particular document or record is privileged, Simplot shall deliver such document or record to the United States unless it invokes dispute resolution pursuant to Section X (Dispute Resolution), in which case Simplot shall not have an obligation to deliver such document or record until a final determination is made, pursuant to the procedures set forth in Section X (Dispute Resolution), that such document or record is not privileged.

77. Simplot may also assert that information required to be provided under this

Section is protected as Confidential Business Information ("CBI") under 40 C.F.R. Part 2. As to
any information that Simplot seeks to protect as CBI, Simplot shall follow the procedures set
forth in 40 C.F.R. Part 2, provided that: Simplot shall not assert a CBI claim with respect to any
physical sampling, monitoring, or analytical data other than data related to: development of new
or modified products; development of new or modified production processes; production
materials or analyses collected for quality control or other manufacturing purposes; or analyses
undertaken for competitive business purposes. If Simplot claims any information related to
Financial Assurance is CBI, in submissions required pursuant to Appendix 2 (Financial

Assurance), Simplot shall submit two versions: one version with the claimed CBI material redacted, and so identified in the document, which will be publicly available, and a second (unredacted) version that will contain the claimed CBI material.

78. This Consent Decree in no way limits or affects any right of entry and inspection, or any right to obtain information, held by the United States pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of Simplot to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.

XII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS

- 79. This Consent Decree resolves the civil claims of the United States for the violations at the Facility alleged in the Complaint filed in this action through the date of the lodging of the Consent Decree. This Consent Decree also resolves such claims, if any, of the United States against Simplot's corporate officers, directors, and employees, acting in their capacities as such, but only as to the liability arising out of Simplot's liability. For continuing violations alleged in the Complaint, provided that Simplot complies with this Consent Decree, as set forth in Paragraph 81, from the date of lodging of the Consent Decree through its Effective Date, these claims shall also be resolved through the Effective Date of this Consent Decree, as of the Effective Date. Provided that Simplot complies with the Consent Decree from the Effective Date of this Consent Decree pursuant to Section XVIII (Termination), these claims shall be finally resolved as of the date the Consent Decree terminates.
- 80. Provided that Simplot is in compliance with this Consent Decree and subject to the reservation set forth below, Plaintiff covenants not to sue or take administrative action under

Section 3008(a) of RCRA, 42 U.S.C. § 6928(a), seeking to require Simplot's Facility to comply with RCRA Requirements, with respect to: (a) the generation, treatment, storage, transport, management, and disposal of Bevill-Excluded Wastes that have been commingled with hazardous wastes or otherwise managed in violation of law, as alleged in the Complaint and denied by Simplot, and that are resolved in accordance with Paragraph 79; and (b) wastes or other materials that Paragraphs 15 through 18 allow to be input to Upstream Operations or Downstream Operations directly or via the Acid Value Recovery System, SPA Recovery Units, Granulation Recovery System, or together with Bevill-Excluded Wastes. Nothing in this Paragraph shall affect Plaintiff's rights to determine and require corrective action that may be required at the Facility pursuant to Plaintiff's authorities under federal law.

- 81. The resolution under this Section XII (Effect of Settlement/Reservation of Rights) of the Plaintiff's civil claims set forth in the Complaint and the Plaintiff's covenants not to sue are expressly conditioned upon Simplot's timely and satisfactory compliance with the requirements of this Consent Decree. For the purposes of this Paragraph (and Paragraphs 79 and 80), and with respect to those wastes or other materials that Paragraphs 15 through 18 allow to be input to Upstream Operations or Downstream Operations directly or via the Acid Value Recovery System, SPA Recovery Units, Granulation Recovery System, or together with Bevill-Excluded Wastes, compliance with the Continuing Compliance Criteria set forth in Paragraph 34(b) constitutes compliance with this Consent Decree.
- 82. The United States reserves all legal and equitable remedies available to enforce the provisions of this Consent Decree, and Simplot reserves all legal and equitable defenses available to it in the defense of any such enforcement. This Consent Decree shall not be construed to limit the rights of the United States to obtain penalties or injunctive relief under the

federal and state environmental statutes or their implementing regulations, or under other federal or state law regulations or permit conditions, including Section 3008(h) of RCRA, 42 U.S.C. § 6928(h), except as expressly specified in Paragraphs 79 and 80, and Simplot in any such action shall not assert any defense based upon the contention that such claims raised by the Plaintiff were or should have been brought in the instant case under principles of waiver, res judicata, collateral estoppel, issue preclusion, claim preclusion, claim-splitting, or other such defense.

The United States further retains all authority and reserve all rights to take any and all actions authorized by law to protect human health and the environment, including Corrective Action Work and non-Consent Decree corrective action, and all legal and equitable remedies to address any imminent and substantial endangerment to the public health or welfare or the environment arising at, or posed by, Simplot's Facility, whether related to the violations addressed in this Consent Decree or otherwise.

- 83. This Consent Decree is not a permit, or a modification of any permit, under any federal, state, or local law or regulation. While this Consent Decree resolves the Parties' dispute regarding the violations alleged in the Complaint as set forth in Paragraph 79, compliance with the terms of this Consent Decree does not guarantee compliance with all applicable federal, state, or local laws, regulations, or permits. Except as provided in Paragraphs 35, 79, 80, and 81, Simplot is not relieved of its obligation to achieve and maintain compliance with all applicable federal, state, and local laws, regulations, and permits. Simplot's compliance with this Consent Decree shall be no defense to any action commenced by Plaintiff pursuant to any such law, regulation, or permit, except as expressly specified in Paragraphs 35, 79, 80, and 81.
- 84. This Consent Decree does not limit or affect the rights of the Parties against any third parties (persons not a Party to this Consent Decree), nor does it limit the rights of third

parties except as provided by the doctrine of federal preemption or by other applicable principles of law or precedent.

- 85. This Consent Decree shall not be construed to create rights or obligations in, or grant any cause of action to, any third party.
- 86. Nothing in the Complaint filed in this action or in this Consent Decree, including the execution and implementation of this Consent Decree, shall constitute an admission by Simplot of any violation of RCRA Requirements, EPCRA, or of any of the allegations in the Complaint. Simplot reserves all rights to dispute the factual and legal representations of the Complaint and Consent Decree except in an action to enforce this Consent Decree by a Party. The terms of this Consent Decree may not be used as evidence in any litigation between the Parties except (a) pursuant to Section X (Dispute Resolution), (b) in an action to enforce this Consent Decree, or (c) in an action by Plaintiff in which Simplot asserts a defense based on this Consent Decree.

XIII. COSTS

87. The Parties shall bear their own costs of this action, including attorneys' fees, except that the United States shall be entitled to collect costs (including attorneys' fees) incurred in any action necessary to access Financial Assurance pursuant to Paragraph 26 and Appendix 2 (Financial Assurance) of this Consent Decree, or to collect any portion of the civil penalty, any stipulated penalties, or other costs due under this Consent Decree but not paid by Simplot.

XIV. NOTICES

88. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree in accordance with Section VII (Reporting

Requirements) they shall be made electronically, unless otherwise requested by EPA, and addressed as follows:

As to DOJ by email: Eescdcopy.enrd@usdoj.gov

Re: DJ #90-7-1-08388/8

As to DOJ by mail: EES Case Management Unit

Environment and Natural Resources Division

U.S. Department of Justice

P.O. Box 7611

Washington D.C. 20044-7611 Re: DOJ No. 90-7-1-08388/8

via overnight service: 4 Constitution Square 150 M Street, NE Room 2.900

Washington, DC 20002 Re: DOJ #90-7-1-08388/8

As to EPA by mail: Director, Enforcement and Compliance Assurance

Division

US EPA Region 8 (8ENF-IO)

1595 Wynkoop St. Denver, CO 80202-1129

and with respect to notices pertaining to Financial Assurance:

<u>To EPA</u>: Director, Enforcement and Compliance Assurance

Division

US EPA Region 8 (8ENF-IO)

1595 Wynkoop St.

Denver, CO 80202-1129

To Simplot: Vice President, Environmental & Regulatory

Affairs

J.R. Simplot Company 1099 W. Front Street Boise, ID 83702

Senior Environmental Counsel

J.R. Simplot Company 1099 W. Front Street Boise, ID 83702

- 89. Any Party may, by written notice to the other Party, change its designated notice recipient or notice address provided above.
- 90. Notices submitted pursuant to this Section shall be deemed submitted upon electronic transmission, unless otherwise provided in this Consent Decree or by mutual agreement of the Parties in writing.
- Within thirty (30) Days of submission to EPA, Simplot shall also post all (a) 91. documents requiring EPA approval under this Consent Decree, and (b) reports submitted to EPA under Paragraph 42 (Periodic Reporting), either on Simplot's company website or on a dedicated website, in a manner that shall be readily accessible, clearly labeled, and clearly presented to the public. Each document posted shall remain posted for at least five (5) years. Simplot shall include the following language alongside all submissions posted pursuant to this Paragraph: "This submission has been generated in accordance with Simplot's settlement with the United States in U.S. v. J.R. Simplot Co., Civ. No. 20-CV-125-F (D. Wyo.) and may not have been reviewed or verified by U.S. EPA prior to posting. If you have questions about the information in this submission, please contact Alan Prouty, Vice President Environmental & Regulatory Affairs, 1099 W. Front Street, Boise, ID 83702, (208) 780-7365, alan.prouty@simplot.com." Pursuant to Paragraph 94, the parties may by subsequent written agreement modify the requirements of this Paragraph to specify alternative means of providing the public with access to documents and reports under this Paragraph; the Parties anticipate that any such modification would be non-material under Paragraph 94 to the extent the modification ensures that documents and reports under this Paragraph will continue to be made available in a manner that is readily accessible, clearly labeled, and clearly presented to the public.

XV. EFFECTIVE DATE

92. The Effective Date of this Consent Decree shall be the date of a Final Order by which this Consent Decree is entered by the Court or by which a motion to enter the Consent Decree is granted, whichever occurs first, as recorded on the Court's docket. The filing or pendency of an appeal of the Court's entry of this Consent Decree shall not stay the Effective Date, except as may be otherwise determined pursuant to Paragraph 94 of Section XVII (Modification). Simplot hereby agrees that it shall be bound from the date of its execution of this Decree to perform obligations scheduled in this Consent Decree to occur prior to the Effective Date.

XVI. RETENTION OF JURISDICTION

93. The Court shall retain jurisdiction over this case until termination of this Consent Decree, pursuant to Section XVIII (Termination), for the purpose of resolving disputes arising under this Consent Decree (including disputes under any trust agreements entered pursuant hereto) or entering orders modifying this Consent Decree, pursuant to Sections X (Dispute Resolution) and XVII (Modification), or effectuating or enforcing compliance with the terms of this Consent Decree.

XVII. MODIFICATION

94. The terms of this Consent Decree may be modified only by a subsequent written agreement of the Parties to this Consent Decree as set forth herein. Any modifications to the provisions of Appendices 1 through 9 hereto, and any other modifications to any other provisions of this Consent Decree that do not constitute a material change to this Consent Decree, may be made without approval by the Court upon written agreement between the Parties. Any such non-material changes shall become enforceable under this Consent Decree upon execution by both

Simplot and the United States, shall be made available to the public by EPA (except to the extent such changes contain information determined to be CBI pursuant to Paragraph 77 and 40 C.F.R. Part 2), and shall periodically be filed with the Court. Any other modifications agreed to by the Parties shall be effective only upon approval by the Court. Except as otherwise provided in this Paragraph and Paragraph 96, a Party's refusal to agree to a modification of this Consent Decree shall be subject to dispute resolution, but a Party seeking judicial review of such a refusal shall bear the burden of demonstrating that it is entitled to the requested modification based on a significant change in factual conditions or the law or other reason that would make inequitable the continued application of the Consent Decree without the modification sought.

95. In the event that a potential transferee under Section II (Applicability) has agreed to become a party to this Consent Decree and subject to all its terms and provisions, it may do so upon written approval of the United States pursuant to Section II (Applicability) and Section XVII (Modification), without further order from the Court, in which event a supplemental signature page will be affixed to this Consent Decree and filed with the Court.

XVIII. TERMINATION

96. Periodic Review of Work Status. Once every three (3) years following the Effective Date, Simplot may request a meeting to review the status of the Work and to evaluate whether discrete portions of the Work have either been completed or may be accomplished and supervised under an administrative order or permit in lieu of this Consent Decree. If the Parties agree to such a modification, such agreement shall be memorialized in a written modification to this Consent Decree pursuant to Section XVII (Modification) and shall not require judicial approval. If the Parties agree that such modifications allow this Consent Decree to be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the

Consent Decree. The Parties' inability to reach agreement under this Paragraph shall not be subject to dispute resolution or judicial review.

- 97. Completion of Work. Within ninety (90) Days after Simplot concludes that all Work required under this Consent Decree has been fully performed, Simplot shall notify EPA of its intention to request an Acknowledgement of Completion under this Paragraph and offer EPA the opportunity to conduct an inspection of the Facility to be attended by EPA and Simplot at a mutually agreeable time. If EPA conducts such inspection, then following the inspection, and correction of any problems or deficiencies noted by EPA, Simplot shall submit one or more written reports by a third-party registered professional engineer, in the relevant technical field, certifying compliance with Section V (Compliance Requirements) that the Work has been completed in full satisfaction of the requirements of this Consent Decree. The report(s) shall indicate the case name and civil action number, and shall be submitted, together with a request for Acknowledgment of Completion, in accordance with Section VII (Reporting Requirements). Third-party engineer certification of any of the written reports may be waived at EPA's discretion. If, following Simplot's notification under this Paragraph, EPA notifies Simplot that EPA declines the opportunity to conduct an inspection of the Facility, or if EPA does not respond within forty-five (45) Days, Simplot shall submit the report(s) specified in this Paragraph in support of a request for Acknowledgment of Completion.
- 98. If, after review of the written report(s) and certification, EPA determines that any portion of the Work has not been completed in accordance with this Consent Decree, EPA will notify Simplot in writing of the activities and/or obligations that must be undertaken to complete the Work. Without prejudice to the United States' right to enforce this Consent Decree or to assess penalties for Simplot's failure to complete any portion of the Work in accordance with

this Consent Decree, EPA will set forth in the notice a schedule for performance of the activity or activities and/or obligation(s) required under the Consent Decree, or will require Simplot to submit a schedule for EPA approval pursuant to Section V (Compliance Requirements). Simplot shall perform all activities described in the notice in accordance with the specifications and schedules established therein, subject to Simplot's right to invoke the dispute resolution procedures set forth in Section X (Dispute Resolution).

- 99. If EPA concludes, based on the initial or any subsequent request for an Acknowledgment of Completion by Simplot, that the Work has been fully performed in accordance with this Consent Decree, EPA will so notify Simplot in writing, which notice shall constitute the Acknowledgment of Completion.
- 100. Termination. After Simplot has completed the requirements set forth in Paragraphs 97 and 98 of this Section, has obtained an Acknowledgment of Completion, has complied with all other requirements of this Consent Decree, and has paid the civil penalty and any accrued stipulated penalties as required by this Consent Decree, Simplot may serve upon the United States a Request for Termination, stating that Simplot has satisfied those requirements, together with all necessary supporting documentation.
- 101. Following receipt by the United States of Simplot's Request for Termination, the Parties shall confer informally concerning the request and any disagreement that the Parties may have as to whether Simplot has satisfactorily complied with the requirements for termination of this Consent Decree. If the United States agrees that the Consent Decree may be terminated, the Parties shall submit, for the Court's approval, a joint stipulation terminating the Consent Decree.
- 102. If the United States does not agree that the Consent Decree may be terminated,
 Simplot may invoke dispute resolution under Section X (Dispute Resolution). However, all time

periods and deadlines established under Section X shall be extended by sixty (60) Days, or more by the agreement of the Parties.

103. The parties acknowledge the possibility that future federal or state laws or regulations may be enacted concerning requirements established under the Consent Decree and, if so, might form the basis for a modification to the Consent Decree under Paragraph 94, or under Fed. R. Civ. P. 60(b). Nothing in this Paragraph is intended to waive Plaintiff's right to oppose a request or motion for modification, or to waive any argument that such modification would be unwarranted.

XIX. PUBLIC PARTICIPATION

104. This Consent Decree shall be lodged with the Court for a period of not less than thirty (30) Days for public notice and comment in accordance with 28 C.F.R. § 50.7. The United States reserves the right to withdraw or withhold its consent if the comments regarding the Consent Decree disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate. Simplot consents to entry of this Consent Decree without further notice and agrees not to withdraw from or oppose entry of this Consent Decree by the Court or to challenge any provision of the Consent Decree, unless the United States has notified Simplot in writing that it no longer supports entry of the Consent Decree.

XX. SIGNATORIES/SERVICE

105. Each undersigned representative of Simplot and the Assistant Attorney General for the Environment and Natural Resources Division of the Department of Justice, or his/her designee, certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind the Party he or she represents to this document.

106. This Consent Decree may be signed in counterparts, and its validity shall not be challenged on that basis. Simplot agrees to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rules 4 and 5 of the Federal Rules of Civil Procedure and any applicable Local Rules of this Court including, but not limited to, service of a summons. Defendant need not file an answer to the Complaint unless or until the Court expressly declines to enter this Consent Decree.

XXI. INTEGRATION

207. This Consent Decree and its Appendices constitute the final, complete, and exclusive agreement and understanding among the Parties with respect to the settlement embodied in the Consent Decree and supersede all prior agreements and understandings, whether oral or written, concerning the settlement embodied herein. Other than the Appendices, which are attached to and incorporated in this Consent Decree, and the Consolidated Materials Management Practices report referenced in Paragraph 18, no other document, nor any representation, inducement, agreement, understanding, or promise, constitutes any part of this Consent Decree or the settlement it represents, nor shall it be used in construing the terms of this Consent Decree.

XXII. FINAL JUDGMENT

108. Upon approval and entry of this Consent Decree by the Court, this Consent Decree shall constitute a final judgment of the Court as to the United States and Simplot. The Court finds that there is no just reason for delay and therefore enters this judgment as a final judgment under Fed. R. Civ. P. 54 and 58.

XXIII. 26 U.S.C. SECTION 162(f)(2)(A)(ii) IDENTIFICATION

109. For purposes of the identification requirement of Section 162(f)(2)(A)(ii) of the Internal Revenue Code, 26 U.S.C. § 162(f)(2)(A)(ii), performance of Section II (Applicability), Paragraph 7; Section V (Compliance Requirements), Paragraphs 13-30, 34 (except with respect to dispute resolution), 35, and related Appendices 1, 2, 4, 5 and 6; Section VII (Reporting Requirements), Paragraphs 41-42 and 44-45; Section XI (Information Collection and Retention), Paragraphs 73-75; and Section XIV (Notices), Paragraph 91, is restitution or required to come into compliance with law.

XXIV. APPENDICES

- 110. The following Appendices are attached to and part of this Consent Decree:
- Appendix 1 sets forth the following Operating and Closure Requirements:
 - A. Groundwater Requirements;
 - B. Phosphogypsum Stack System Construction and Operational Requirements;
 - C. Closure of Phosphogypsum Stacks/Stack Systems;
 - D. Critical Conditions and Temporary Measures;
 - E. Phosphogypsum Stack System Permanent Closure Application;

Appendix 2 sets forth requirements for Financial Assurance;

Appendix 3 contains Site Maps of the Simplot Rock Springs Facility;

Appendix 4 is the Facility Report;

Appendix 5 is the Best Management Practices (BMP) Plan, and includes:

- A. Minimizing and Addressing Spills and Leaks;
- B. Inspections and Integrity of Tanks, Sumps, and Secondary Containment;

Appendix 6 is the RCRA Project Narrative and Compliance Schedule;

Appendix 7 contains the Alternative Liner Demonstration;

Appendix 8 is the Initial Closure Plan for the Facility; and

Appendix 9 sets forth Additional Definitions of Terms Used in Appendices.

Dated and entered this Hay of September, 2020.

OF WYOMING

J. R. Simplot Company, Civil Action No. 20-CV-125-F, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE UNITED STATES OF AMERICA:

JEFFREY BOSSERT CLARK Assistant Attorney General Environment and Natural Resources Division United States Department of Justice 950 Pennsylvania Avenue, NW Washington, D.C. 20530

Date: July 1, 2020

/s/David Rosskam
DAVID ROSSKAM
Senior Counsel
Environmental Enforcement Section
Environment and Natural Resources Division
United States Department of Justice
P.O. Box 7611
Washington, D.C. 20044
(202) 514-3974

J. R. Simplot Company, Civil Action No. 20-CV-125-F, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE UNITED STATES OF AMERICA:

MARK A. KLAASSEN United States Attorney District of Wyoming

Date: <u>July 9, 2020</u>

/s/Nicholas Vassallo NICHOLAS VASSALLO Assistant United States Attorney District of Wyoming P.O. Box 668 Cheyenne, Wyoming 82003 Telephone: (307) 772-2124

J. R. Simplot Company, Civil Action No. 20-CV-125-F, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Date: July 6, 2020 /s/Susan Bodine

SUSAN BODINE

Assistant Administrator

Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

Date: July 6, 2020 /s/Ann Stephanos

ANN STEPHANOS Attorney-Advisor

Office of Enforcement and Compliance Assurance United States Environmental Protection Agency

Washington, D.C. 20460

J. R. Simplot Company, Civil Action No. 20-CV-125-F, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Date: June 18, 2020 /s/K.C. Schefski

K.C. SCHEFSKI Regional Counsel

United States Environmental Protection Agency

Region 8

Date: June 18, 2020 /s/Max Greenblum

MAX GREENBLUM

Assistant Regional Counsel

United States Environmental Protection Agency

Region 8 (8ORC-LEC) 1595 Wynkoop St. Denver, CO 80202-1129

J. R. Simplot Company, Civil Action No. 20-CV-125-F, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR SIMPLOT:

/s/James B. Alderman Date: June 17, 2020

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Appendix 1

Operating and Closure Requirements

Simplot Rock Springs Consent Decree Appendix 1.A

APPENDIX 1.A: GROUNDWATER REQUIREMENTS

I. Groundwater Monitoring Plan Requirements

- (1) Prior to the Effective Date, Simplot prepared a comprehensive Groundwater monitoring plan (Formation Environmental, Groundwater Monitoring Plan, April 2016), and investigated Groundwater conditions. (Formation Environmental, Groundwater Investigation Summary Report, April 2016).
- (2) Simplot shall comply with this Section I (Groundwater Monitoring Plan Requirements) unless a Wyoming DEQ or EPA issued permit or order contains an approved Groundwater monitoring plan or there exists another Groundwater monitoring plan that satisfies the requirements of this Section that has already been approved by Wyoming DEQ and/or EPA.
- (3) Prior to the Effective Date, Wyoming DEQ approved Simplot's Wyoming Water Quality Application for a Chapter 3 Permit to Construct (App. No 18-365) on October 11, 2018 and issued Permit No. 18-365 on February 4, 2019, which includes an approved Groundwater monitoring plan (Formation Environmental, Groundwater Monitoring Plan, October 2018) (Attachment A hereto) that serves as compliance with this Section I (Groundwater Monitoring Plan Requirements) and will be updated as necessary.
- (4) Monitoring Plan Requirements.
- (a) Using pertinent information (including the examples listed from (b)(i) through (xiii) below), Simplot shall provide EPA with a plan containing findings and recommendations for Groundwater monitoring derived from site-specific information. The Groundwater monitoring plan shall be signed and sealed by the professional geologist or professional engineer who prepared or approved it. The plan shall show the locations of the proposed Background and downgradient monitoring wells, construction details of the monitoring wells, and a water sampling and chemical analysis protocol. The plan shall indicate how to determine Background or (where available) Groundwater quality in the vicinity of the site and any deviations in the quality of the receiving Groundwater in the downgradient monitoring wells, except in cases where Background levels are already established and agreed upon by Wyoming DEQ and/or EPA. EPA will evaluate the adequacy of the plan upon submittal.
- (b) The following information is generally required unless otherwise specified by EPA:
- (i) Hydrogeological, physical and chemical data for the Facility, such as:
- 1. Direction and rate of Groundwater flow, and Background Groundwater quality (all field verified) where available;

- 2. Porosity, horizontal and vertical permeability for the Aquifer(s)¹;
- 3. The depth to, and lithology of, the first confining bed(s);
- 4. Vertical permeability, thickness, and extent of any confining beds;
- 5. Topography, soil information and Surface Water of the State drainage systems surrounding the Facility;
- 6. Geophysical methods (as appropriate) such as ground penetrating radar surveys.
- (ii) Disposal rate and frequency, chemical composition, method of discharge, pond volume, spray-field dimension, or other applicable Facility specific information;
- (iii) Toxicity of waste;
- (iv) Present and anticipated discharge volume and seepage rate to the receiving Groundwater; and physical and chemical characteristics of the Leachate;
- (v) Phosphogypsum Stack System water balance;
- (vi) Other pollution sources located within one-mile radius of the Facility about which Simplot has information or knowledge;
- (vii) Inventory depth, construction details, and cones of depression of water supply wells or well fields and monitoring wells located within one-mile radius of the Facility or potentially affected by the discharge;
- (viii) Facility specific economic and feasibility considerations;
- (ix) Chronological information on water levels in the monitoring wells and water quality data on water samples collected from the water supply and monitoring wells;
- (x) Type and number of waste disposal/waste storage facilities within the Facility;
- (xi) Chronological information on Surface Water of the State flows and water quality upstream and downstream from the Facility;
- (xii) Construction and operation details of waste disposal/waste storage facilities;

¹ "Aquifer" means "a zone, stratum or group of strata that can store and transmit water in sufficient quantities for a specific use." Wyoming Administrative Code. 020.0011.8, Section 2(a).

- (xiii) Relevant land use history of construction and land development adjacent to the Facility.
- (5) Monitoring Wells.
- (a) Location of Monitoring Wells to Detect Migration of Contaminants. Unless Simplot can demonstrate that detection can be obtained by a methodology other than the use of monitoring wells, wells shall be located as required and installed pursuant to the 3013 Order and Wyoming Permit No 18-365 by Rule.

II. Groundwater Monitoring, Reporting, and Assessment

- (1) Monitoring and Reporting:
- (a) On a semi-annual basis, Simplot shall submit Groundwater monitoring data to EPA from all monitoring wells following the receipt of laboratory results.
- (b) The reports must also include:
 - (i) Monitoring well location, construction, and the collection and testing of samples; and
 - (ii) Groundwater monitoring data displayed in graphic form for analyzing trends in water quality.
- (2) Assessment: Simplot shall notify Wyoming DEQ and EPA of any Groundwater quality exceedance as described at Section 6(b)(i)(E)(VII), Chapter 3 Industrial Landfills, Wyoming Environmental Quality Act, W.S. 35-11-101 *et seq*.
- (3) When requested by Wyoming DEQ and/or EPA, Simplot shall inform Wyoming DEQ and/or EPA of the next sampling schedule so that a representative of either Agency may be present.

III. Groundwater Corrective Action Work

- (1) The State of Wyoming is authorized to oversee any needed Groundwater corrective action. Pursuant to Paragraph 82 of the Consent Decree, and Section II (Groundwater Monitoring, Reporting and Assessment Requirements), EPA reserves the right to directly enforce RCRA 3008(h) if Groundwater monitoring confirms any Groundwater quality exceedance as described at Section 6(b)(i)(E)(VII), Chapter 3 Industrial Landfills, Wyoming Environmental Quality Act, W.S. 35-11-101 *et seq.*, or if there is an increase in contaminant concentration (including corrosivity) which EPA or Wyoming DEQ determines constitutes an imminent and substantial endangerment to human health and/or the environment.
- (2) If Corrective Action Work is required, Simplot shall submit a plan for proposed Corrective Action Work ("Corrective Action Plan"), within ninety (90) days of receiving notification of Wyoming DEQ's or EPA's determination, that addresses, at a minimum, the following factors:
- (a) Direction of the plume movement in relationship to existing and potential sources of drinking water;

- (b) Plume size both in the aerial and vertical dimensions;
- (c) Rate of migration of the plume;
- (d) Concentrations of contaminants of/in the plume;
- (e) Rate at which the plume is being attenuated;
- (f) Current and projected future use of adjacent ground and Surface Waters of the State affected by the plume;
- (g) A detailed description of the activities that are proposed to be taken to prevent further migration of the plume and to clean-up the contamination or release.
- (h) The costs of Corrective Action Work; and
- (i) A comparison of the clean up or other Corrective Action Work costs with the benefits to the public of such Corrective Action Work.
- (3) Simplot will provide within thirty (30) days, if requested by Wyoming DEQ or EPA, any additional information or data needed to aid Wyoming DEQ or EPA in making its Corrective Action Work assessment.
- (4) After Simplot submits the Corrective Action Plan, and the Corrective Action Plan is approved by Wyoming DEQ or EPA, Simplot shall perform Corrective Action Work in accordance with the Corrective Action Plan.
- (5) Within thirty (30) days after completing the Corrective Action Work in accordance with the Corrective Action Plan, Simplot shall submit to Wyoming DEQ or EPA a report evaluating the effectiveness of the Corrective Action Work along with a certification that Simplot has completed the Corrective Action Work.

GROUNDWATER MONITORING PLAN

Simplot Phosphates, LLC Rock Springs, Wyoming

October 2018

Prepared for:

Simplot Phosphates, LLC 515 South Highway 430 Rock Springs, WY 82901

Prepared by:



2500 55th Street, Suite 200 Boulder, CO 80301

10-5-2018

10-5-2018

Groundwater Monitoring Plan Simplot Phosphates, LLC, Rock Springs, WY

October 2018

SIMPLOT PHOSPHATES, LLC ROCK SPRINGS, WYOMING

GROUNDWATER MONITORING PLAN

Buz Cotton P.E.

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WYOMING WYOMING



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1.0 INTRODUCTION

This document presents the groundwater monitoring plan for the Simplot Phosphates, LLC (Simplot), phosphate plant near Rock Springs, Wyoming. Groundwater monitoring has been required at the gypsum storage facility (gypsum stack) since its construction in 1986 as a condition of the Permit to Construct (PTC) issued by the Wyoming Department of Environmental Quality (WDEQ) Water Quality Division (WDEQ 1985). This plan provides for groundwater monitoring that is consistent with the most recent version of the PTC (Permit No. 06-606, October 2006 with subsequent extensions) (WDEQ 2006) and Chapter 3 Section 17(d) of the WDEQ Water Quality Rules and Regulations (WDEQ 2012). The plan also incorporates commitments made to the U.S. Environmental Protection Agency (EPA) under the Resource Conservation and Recovery Act (RCRA) Section 3013(a) Administrative Order on Consent (AOC) (EPA 2012). Simplot recently completed an investigation required under the RCRA 3013 AOC and this monitoring plan is consistent with the monitoring that was being performed during the last 3 years of the investigation.

2.0 BACKGROUND

The initial groundwater monitoring requirements for the Simplot Phosphates Rock Springs facility were set forth in the 1985 PTC and are currently included in Permit No. 06-606 as permit condition 5 of 7. Groundwater monitoring is required for the gypsum storage facility as stated in Chapter 3 Section 17(d) of WDEQ Water Quality Rules and Regulations (WDEQ 2012) and results of monitoring are reported to the State of Wyoming.

Monitoring wells PZ-B1 through PZ-B4 and the collection ditch have been sampled quarterly since operation of the gypsum storage facility began, except for PZ-B1 which has not contained sufficient water to sample since March 1987. Groundwater samples were analyzed for pH, specific conductance, total dissolved solids, chloride, fluoride, sulfate, aluminum, cadmium, chromium, copper, vanadium, gross alpha, and radium-226 as required by the permit to construct. In the 2006 renewal of the permit, total phosphorus and radium-226 were added to the analyte list.

In 1991, five additional wells were drilled in the vicinity of the gypsum storage facility (PZ-B5 through PZ-B9). Wells PZ-B5 and PZ-B7 were abandoned during drilling. Wells PZ-B6, PZ-B8, and PZ-B9 were sampled in December 1991 and analyzed for total dissolved solids, chloride, fluoride, sulfate, aluminum, antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, silver, thallium and zinc. These wells were not sampled again until August 2011 when Simplot began sampling them quarterly for the same constituents as listed in the PTC.

With the initiation of the RCRA 3013 AOC in 2012, additional federal requirements for groundwater monitoring were implemented. In July 2012, after the RCRA 3013 AOC was signed, groundwater monitoring was expanded to all six existing functional groundwater

monitoring wells in place at that time: PZ-B2, PZ-B3, PZ-B4, PZ-B6, PZ-B8, and PZ-B9 (As previously mentioned, PZ-B1 has not contained sufficient water to sample since March 1987). An additional groundwater investigation was conducted under the RCRA 3013 AOC from June to September 2013 and included the drilling, installation and sampling of 39 new monitoring wells at 15 boring locations around the facility (Formation 2013). Locations of all groundwater monitoring wells and the groundwater collection ditch are shown in Figure 2-1 and well construction details are summarized in Table 2-1.

Of the 39 new wells installed only 30 contained enough groundwater to be sampled. Sampling was initiated in the 3rd quarter 2013 (September 7 to 13, 2013) at the 30 new wells (with sufficient water), the six existing monitoring wells, and the collection ditch (2 locations), for a total of 38 samples. This sampling event was the first of eight quarterly events that were required by the RCRA investigation work plan. This same scope was repeated for the 4th quarter 2013 (November 2013) and 1st quarter 2014 (March 2014) sampling events. Beginning in 2nd quarter 2014 (June 2014), the list of wells to be sampled was reduced to include a selected group of 23 monitoring wells (the six initial monitoring wells and 17 of the new monitoring wells) and two collection ditch locations, for a total of 25 samples. Recommendations for the reduction in scope were made in the Sampling and Analysis Report (SAR; Formation 2014) and approved by EPA (EPA 2014). The 13 monitoring wells that were eliminated from the sampling program were the deeper intervals at the PZ-B10, BZ-B15, PZ-B18, PZ-B20, and PZ-B21 well nests. Samples were collected from this smaller set of locations during subsequent quarterly events in August 2014, November 2014, February 2015, and April 2015.

Simplot provided a Baseline Groundwater Conditions Report presenting the results of the RCRA 3013 investigation in August 2015 (Formation 2015, revised in January 2016). The primary findings of the investigation were that, based on the high sulfate and TDS concentrations naturally found in shallow groundwater samples obtained prior to and during facility operation, groundwater at the Site is classified as Class III and Class IV(A) according to the Wyoming groundwater quality standards. Groundwater elevation and chemistry data also demonstrated that operations at the facility did not affect groundwater potential or concentrations of constituents of potential concern (COPCs) in groundwater. Groundwater quality standards are provided in Chapter 8 of WDEQ Water Quality Rules and Regulations (WDEQ 2005). Since groundwater flow velocities are sufficiently slow (less than 1 foot per day) quarterly monitoring was viewed as unnecessary and an additional reduction in the groundwater monitoring program was approved by EPA in November 2015. Under the revised program groundwater monitoring was conducted at 10 well locations and the collection ditch with samples collected semiannually. Sampling was conducted for an additional 3 years under the RCRA 3013 AOC at the request of EPA with the last event completed in June 2018. On July 18, 2018 Simplot was notified that the requirements of the AOC had been met and that continued groundwater monitoring would be coordinated with WDEQ Water Quality Division, pursuant to Wyoming regulatory requirements.

3.0 GROUNDWATER MONITORING PROGRAM

Based on the analysis of groundwater quality and potentiometric data and the recommendations presented in the Baseline Groundwater Conditions Report (Formation Environmental 2015), the long-term groundwater monitoring network will be expanded from that in effect under the prior PTC. Groundwater level measurements will be performed quarterly at all 45 monitoring wells and the groundwater collection ditch. Groundwater samples will be collected for water quality analysis from a subset of 10 monitoring wells and the groundwater collection ditch according to the schedule provided in Table 3-1. The sample locations are shown circled in red in Figure 2-1. This is the same sampling scope approved by EPA under the RCRA 3013 AOC in November 2015. Groundwater samples will be collected from the original monitoring wells PZ-B2, PZ-B3, PZ-B4 downgradient of the groundwater collection ditch; one location in the groundwater collection ditch; and from seven of the recently installed monitoring wells semi-annually. The seven additional locations (PZ-B10A, PZ-B9, PZ-B12A, PZ-B18A, PZ-B20B, PZ-B22B, and PZ-B16A) provide for monitoring upgradient of the gypsum storage facility, east and west of the gypsum storage facility, and downgradient and outside the influence of the groundwater collection ditch. It is anticipated that PZ-B9 will be abandoned in the future as the gypsum storage facility expansion inundates the location. Upgradient monitoring at PZ-B18A will be sufficient as a replacement for the loss of this well.

The analyte list for long-term groundwater monitoring is provided in Table 3-2. The list is based on the results of RCRA 3013 investigation. Based on the conclusions presented in the Baseline Groundwater Conditions Report (Formation 2015), this list is adequate for the detection of potential changes in groundwater quality due to facility influence.

4.0 REPORTING

Groundwater monitoring data will be provided to WDEQ semi-annually following the receipt of laboratory results.

5.0 REFERENCES

- Formation Environmental (Formation) 2013. Sampling and Analysis Work Plan. Prepared for Simplot Phosphates, LLC, Rock Springs, Wyoming. Revision 2. (Includes SAP, QAPP, HASP, and SOPs). December 2013.
- Formation Environmental (Formation) 2014. Sampling and Analysis Report. Prepared for Simplot Phosphates, LLC, Rock Springs, Wyoming. May 2014.
- Formation Environmental (Formation) 2015. Revised Draft Baseline Groundwater Conditions Report. Prepared for Simplot Phosphates, LLC, Rock Springs, Wyoming. January 2016.
- U.S. Environmental Protection Agency EPA 2012. In the Matter of: Simplot Phosphates LLC, Rock Springs, Wyoming, Administrative Order on Consent (CO), U.S. EPA Region 8, CERCLA Docket No. RCRA-08-2012-0004. June 25.
- U.S. Environmental Protection Agency EPA 2014. RE: Confirming EPA Comments on Rock Springs SAR. Email from Linda Jacobson (EPA) to Chelly Reesman (Simplot).
- U.S. Environmental Protection Agency EPA 2015. Letter from Linda Jacobson (EPA) to Alan Prouty (Simplot), Ref: 8ENF-RC, Enclosure 1 EPA Comments on Simplot's June 2015 Groundwater Monitoring Plan and August 2015 Baseline Groundwater Conditions Report. November 19, 2015.
- Wyoming Department of Environmental Quality (WDEQ) 1985. Permit to Construct No. 85-75R, Chevron Chemical Company, Chevron Gypsum Storage Area, WDEQ Water Quality Division Permit 85-75R. April 2, 1985.
- Wyoming Department of Environmental Quality (WDEQ) 2005. Water Quality Rules and Regulations. Chapter 8. Quality Standards for Wyoming Groundwater. Cheyenne, WY.
- Wyoming Department of Environmental Quality (WDEQ) 2006. Permit to Construct No. 06-606, Simplot Phosphates LLC, Phosphogypsum Storage Area Expansion, WDEQ Water Quality Division Permit 06-606. October 11, 2006.

TABLES

Table 2-1: Monitoring Well Construction Details

		Borehole Total				Installed	Top Screen		Bottom Screen						
	Completion		Ground	Tonof	Bottom of			Top Screen		Pottom	Screen Mid-	Drilling	Woll Casing	Woll Casing	Well Screen Slo
Well ID	Date	Depth (ft bgs)	Elev	Top of Casing Elev	Borehole Elev	Screen Length (ft)	bgs)	Elev	Depth (ft bgs)	Bottom Screen Elev	point Elev	Company	Type	Diam. (in)	Size (in)
PZ-B1	Jul-85	52	6566.57	6,565.30	6513.3	40	12	6553.3	52	6513.3	6533.3	Fox	PVC Sch40	4	3120 (111)
PZ-B1	Jul-85	52	6559.19	6,562.35	6506.69	40	12	6546.69	52	6506.69	6526.69	Fox	PVC Sch40	4	
PZ-B2	Jul-85	52	6567.37	6,569.32	6514.37	40	12	6554.37	52	6514.37	6534.37	Fox	PVC Sch40	4	
PZ-B3	Jul-85	42	6576.68	6,579.09	6533.64	40	2	6573.64	42	6533.64	6553.64	Fox	PVC Sch40	4	
PZ-B6	Dec-91	76	6565.03	6,566.66	6480.47	40	36	6520.47	76	6480.47	6500.47	Searle	PVC Sch40	4	
PZ-B8	Dec-91	115	6560.59	6,563.00	6445.58	40	75	6485.58	115	6445.58	6465.58	Scaric	PVC Sch40	4	
PZ-B9	11/26/91	225.5	6700.07	6,702.63	6471.12	40	185	6511.62	225.5	6471.12	6491.37	Boyles	PVC Sch40	4	
PZ-B1R	7/28/13	78	6566.38	6,569.33	6488.38	25	50	6516.38	75	6491.38	6503.88	AK Drilling	PVC Sch40	2	0.02
PZ-B10A	6/26/13	302	6551.06	6,553.27	6248.46	10	35	6516.06	45	6506.06	6511.06	AK Drilling	PVC Sch40	2	0.02
PZ-B10B	6/26/13	302	6551.06	6,553.27	6248.46	5	50	6501.06	55	6496.06	6498.56	AK Drilling	PVC Sch40	2	0.02
PZ-B10C	6/26/13	302	6551.06	6,553.28	6248.46	10	265	6286.06	275	6276.06	6281.06	AK Drilling	PVC Sch40	2	0.02
PZ-B11A	6/28/13	302	6685.87	6,688.21	6383.87	15	115	6570.87	130	6555.87	6563.37	AK Drilling	PVC Sch40	2	0.02
PZ-B11B	6/28/13	302	6685.87	6,688.21	6383.87	10	195	6490.87	205	6480.87	6485.87	AK Drilling	PVC Sch40	2	0.02
PZ-B11C	6/28/13	302	6685.87	6,688.21	6383.87	10	270	6415.87	280	6405.87	6410.87	AK Drilling	PVC Sch40	2	0.02
PZ-B12A	7/2/13	300	6747.01	6,749.42	6447.01	15	105	6642.01	120	6627.01	6634.51	AK Drilling	PVC Sch40	2	0.02
PZ-B12B	7/2/13	300	6747.01	6,749.41	6447.01	10	205	6542.01	215	6532.01	6537.01	AK Drilling	PVC Sch40	2	0.02
PZ-B12C	7/2/13	300	6747.01	6,749.41	6447.01	10	285	6462.01	295	6452.01	6457.01	AK Drilling	PVC Sch40	2	0.02
PZ-B13A	7/26/13	302	6797.48	6,799.87	6495.48	25	135	6662.48	160	6637.48	6649.98	AK Drilling	PVC Sch40	2	0.02
PZ-B13B	7/26/13	302	6797.48	6,799.86	6495.48	20	200	6597.48	220	6577.48	6587.48	AK Drilling	PVC Sch40	2	0.02
PZ-B13C	7/26/13	302	6797.48	6,799.86	6495.48	20	270	6527.48	290	6507.48	6517.48	AK Drilling	PVC Sch40	2	0.02
PZ-B14	7/9/13	110	6597.63	6,599.74	6487.63	25	85	6512.63	110	6487.63	6500.13	AK Drilling	PVC Sch40	2	0.02
PZ-B15A	7/2/13	102	6595.04	6,597.33	6493.04	15	50	6545.04	65	6530.04	6537.54	AK Drilling	PVC Sch40	2	0.02
PZ-B15B	7/2/13	102	6595.04	6,597.33	6493.04	10	90	6505.04	100	6495.04	6500.04	AK Drilling	PVC Sch40	2	0.02
PZ-B16A	7/11/13	300	6625.52	6,627.95	6325.52	25	90	6535.52	115	6510.52	6523.02	AK Drilling	PVC Sch40	2	0.02
PZ-B16B	7/11/13	300	6625.52	6,627.93	6325.52	20	180	6445.52	200	6425.52	6435.52	AK Drilling	PVC Sch40	2	0.02
PZ-B16C	7/11/13	300	6625.52	6,627.94	6325.52	20	240	6385.52	260	6365.52	6375.52	AK Drilling	PVC Sch40	2	0.02
PZ-B17A	7/13/13	300	6716.95	6,719.37	6416.95	25	110	6606.95	135	6581.95	6594.45	AK Drilling	PVC Sch40	2	0.02
PZ-B17B	7/13/13	300	6716.95	6,719.40	6416.95	20	210	6506.95	230	6486.95	6496.95	AK Drilling	PVC Sch40	2	0.02
PZ-B17C	7/13/13	300	6716.95	6,719.40	6416.95	20	270	6446.95	290	6426.95	6436.95	AK Drilling	PVC Sch40	2	0.02
PZ-B18A	7/24/13	302	6782.51	6,784.85	6480.51	25	155	6627.51	180	6602.51	6615.01	AK Drilling	PVC Sch40	2	0.02
PZ-B18B	7/24/13	302	6782.51	6,784.83	6480.51	20	212	6570.51	232	6550.51	6560.51	AK Drilling	PVC Sch40	2	0.02
PZ-B18C	7/24/13	302	6782.51	6,784.84	6480.51	20	280	6502.51	300	6482.51	6492.51	AK Drilling	PVC Sch40	2	0.02
PZ-B19A	7/30/13	302	6771.44	6,773.93	6469.44	25	125	6646.44	150	6621.44	6633.94	AK Drilling	PVC Sch40	2	0.02
PZ-B19B	7/30/13	302	6771.44	6,773.92	6469.44	20	190	6581.44	210	6561.44	6571.44	AK Drilling	PVC Sch40	2	0.02
PZ-B19C	7/30/13	302	6771.44	6,773.94	6469.44	20	265	6506.44	285	6486.44	6496.44	AK Drilling	PVC Sch40	2	0.02
PZ-B20A	7/28/13	302	6796.75	6,799.15	6494.75	25	145	6651.75	170	6626.75	6639.25	AK Drilling	PVC Sch40	2	0.02
PZ-B20B	7/28/13	302	6796.75	6,799.12	6494.75	20	200	6596.75	220	6576.75	6586.75	AK Drilling	PVC Sch40	2	0.02
PZ-B20C	7/28/13	302	6796.75	6,799.15	6494.75	20	265	6531.75	285	6511.75	6521.75	AK Drilling	PVC Sch40	2	0.02
PZ-B21A	6/29/13	300	6703.55	6,706.04	6403.55	15	140	6563.55	155	6548.55	6556.05	AK Drilling	PVC Sch40	2	0.02
PZ-B21B	6/29/13	300	6703.55	6,706.03	6403.55	10	185	6518.55	195	6508.55	6513.55	AK Drilling	PVC Sch40	2	0.02
PZ-B21C	6/29/13	300	6703.55	6,706.03	6403.55	10	230	6473.55	240	6463.55	6468.55	AK Drilling	PVC Sch40	2	0.02
PZ-B22A	7/14/13	106	6619.77	6,622.14	6513.77	15	58	6561.77	73	6546.77	6554.27	AK Drilling	PVC Sch40	2	0.02
PZ-B22B	7/14/13	106	6619.77	6,622.13	6513.77	10	90	6529.77	100	6519.77	6524.77	AK Drilling	PVC Sch40	2	0.02
PZ-B23A	7/16/13	200	6532.99	6,535.36	6332.99	15	21	6511.99	36	6496.99	6504.49	AK Drilling	PVC Sch40	2	0.02
PZ-B23B	7/16/13	200	6532.99	6,535.33	6332.99	10	57	6475.99	67	6465.99	6470.99	AK Drilling	PVC Sch40	2	0.02
PZ-B23C	7/16/13	200	6532.99	6,535.33	6332.99	10	185	6347.99	195	6337.99	6342.99	AK Drilling	PVC Sch40	2	0.02
Notes:															
All elevation	ns indicated in	Feet above I	Mean Sea Le	evel (msl)											
	ments to insta	lled well mat	terials given	in feet below	ground surface	(ft bgs)									

Table 3-1: Long-Term Groundwater Quality Sampling Locations and Frequency

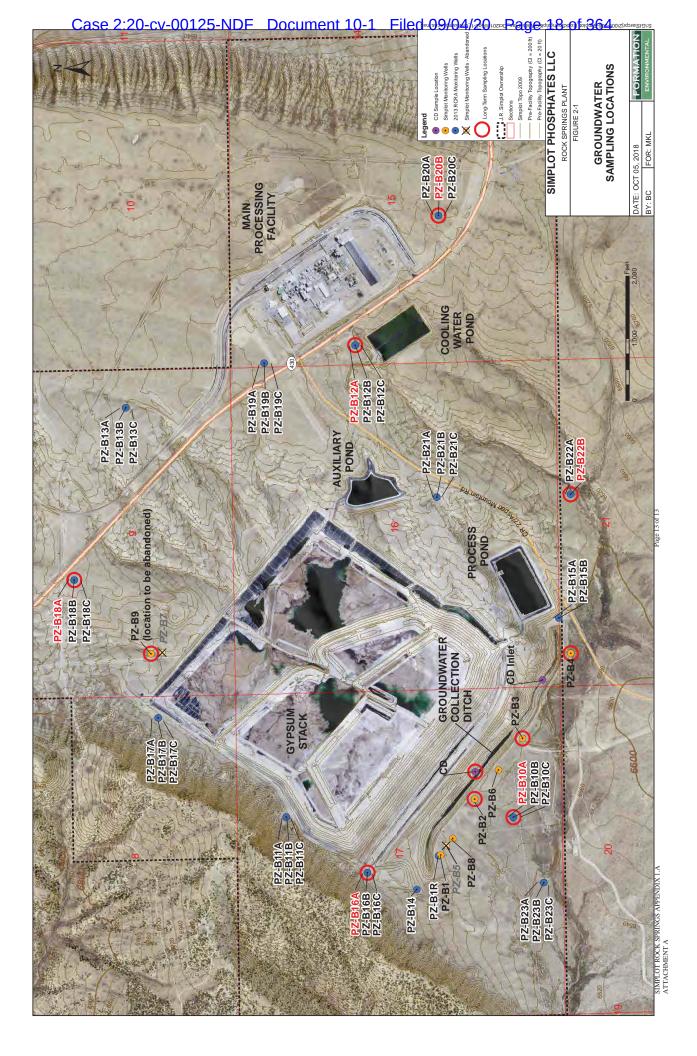
Location	ocation Location Description			
CD	Groundwater Collection Ditch	Semi-annual		
PZ-B2	Downgradient of CD, within CD hydraulic influence	Semi-annual		
PZ-B3	Downgradient of CD, within CD hydraulic influence	Semi-annual		
PZ-B4	Downgradient of CD, within CD hydraulic influence	Semi-annual		
PZ-B10A	Downgradient of CD, no CD hydraulic influence	Semi-annual		
PZ-B9	Upgradient of gypsum storage facility	Semi-annual		
PZ-B12A	Upgradient of gypsum stack, downgradient of processing facility	Semi-annual		
PZ-B18A	Upgradient of gypsum stack west of processing facility	Semi-annual		
PZ-B20B	Upgradient of gypsum stack, east of processing facility	Semi-annual		
PZ-B22B	Downgradient of facility, east of gypsum storage facility	Semi-annual		
PZ-B16A	West of gypsum storage facility	Semi-annual		

Table 3-2: Analytical Methods for Long-Term Groundwater Sampling

Analyte	Method	Reporting Limit (RL)	Units					
Field Parameters								
рН	Field Meter	±0.1	SU					
Specific Conductivity	Field Meter	5	µmho/cm					
Temperature	Field Meter	0.1	°C					
Turbidity	Field Meter	±0.1	NTU					
Dissolved Oxygen	Field Meter	0.1	mg/L					
General Chemistry								
Alkalinity	SM 2320B	5	mg/L					
TDS	SM 2540	10	mg/L					
Major Anions								
Fluoride	EPA 300.0	0.1	mg/L					
Chloride	EPA 300.0	0.2	mg/L					
Sulfate	EPA 300.0	0.3	mg/L					
Nitrate/Nitrite	EPA 353.2	0.1	mg/L					
Major Cations (Dissolved)								
Calcium	EPA 200.7	1	mg/L					
Magnesium	EPA 200.7	1	mg/L					
Potassium	EPA 200.7	1	mg/L					
Sodium	EPA 200.7	1	mg/L					
Metals/Metalloids (Total)								
Aluminum	EPA 200.7	0.1	mg/L					
Arsenic	EPA 200.8	0.003	mg/L					
Cadmium	EPA 200.8	0.0002	mg/L					
Chromium	EPA 200.7	0.006	mg/L					
Phosphorus	EPA 200.7	0.1	mg/L					
Selenium	EPA 200.8	0.002	mg/L					

RL is subject to change based on laboratory capabilities at time of sample submittal.

FIGURES



Simplot Rock Springs Consent Decree Appendix 1.B

APPENDIX 1.B

PHOSPHOGYPSUM STACK SYSTEM CONSTRUCTION AND OPERATIONAL REQUIREMENTS

- I. Phosphogypsum Stack System general criteria¹
 - A. Phosphogypsum Stack Systems. The purpose of this document is to ensure the physical integrity of impoundments used to manage Phosphogypsum and Process Wastewater generated during production of phosphoric acid and phosphate fertilizer. This document establishes the minimum design, construction, operation, inspection, and maintenance requirements to ensure that the Phosphogypsum Stack System impoundments meet critical safety standards and do not cause unplanned releases to the environment. These requirements include maintaining inspection Logs and developing and maintaining plans to respond to emergency conditions.
 - Performance standards. A Phosphogypsum Stack System shall be designed, constructed, operated, maintained, closed, and monitored to control and minimize the movement of waste or other materials into the environment.
 - 2. Phosphogypsum Stack System operation plan. Within six (6) months of the Effective Date, Simplot shall have a written operation plan that provides detailed instructions for the daily operation of the Phosphogypsum Stack System. Simplot shall maintain the operation plan at the Facility, and it will be accessible to operators of the Phosphogypsum Stack System. Required components of an operation plan are found in Section VIII.E.
 - 3. <u>Groundwater monitoring</u>. The Facility shall perform Groundwater monitoring and reporting as described in Appendix 1.A (Groundwater Requirements).
 - 4. <u>Surface Water² management</u>. Phosphogypsum Stack Systems shall be operated for the collection, control, recycling and/or treatment of Run-off³ from the systems as necessary to meet the applicable water quality standards of the State of Wyoming.

¹ All test methods, standards, and other similar protocols referenced in this appendix shall include any future amendments or replacements.

² See definition of "Surface Waters of the State" in Appendix 9.

³ "Run-off" means any rainwater, Leachate, or other liquid that drains over land from any part of a Phosphogypsum Stack System.

- 5. Leachate management. Any Leachate emanating from a Phosphogypsum Stack System shall be routed to a Return Pond⁴ to be contained within the system or recirculated to the production plant; or if discharged, treated (if required) to meet the applicable water quality standards and requirements of the State of Wyoming.
- 6. Interim Stack System Management Plan ("ISSMP"). Within six (6) months of the Effective Date, Simplot shall submit to the EPA for approval, an ISSMP for the Phosphogypsum Stack System. The ISSMP shall provide instructions for two (2) years of operation and management of the Phosphogypsum Stack System. The ISSMP shall provide instructions for two (2) years of operation and management of the Phosphogypsum Stack System should a shutdown occur such that no phosphoric acid will be produced at the Facility for up to a two (2) year period. By July 1 of each following year, Simplot shall revise the ISSMP and submit such revisions to the EPA for approval, taking into account the Process Wastewater levels and the existing configuration of the Phosphogypsum Stack System as of June 1 of that year. The ISSMP shall be designed to protect human health and the environment and shall include:
 - A detailed description of Process Wastewater management a. procedures that will be implemented so that the Phosphogypsum Stack System operates in accordance with all applicable requirements in this Section. These procedures shall address the actual Process Wastewater levels present at the Facility as of June 1 of each year, and shall assume that the Facility will receive average annual precipitation during the subsequent two (2) year period;
 - A detailed description of the required procedures for the b. daily operation and routine maintenance of the Phosphogypsum Stack System (including required environmental sampling and analyses), as well as for any maintenance or repairs recommended following annual inspections of the Phosphogypsum Stack System;
 - Identification of all machinery, equipment, and materials C. necessary to implement the plan as well as actions that shall be taken to assure the availability of these items during the planning period;

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⁴ The phosphoric acid wastewater decanted from the Phosphogypsum Stack flows to what is often referred to as the Return Pond, return surge pond, process pond or decant pond.

- d. Identification of the sources of power or fuel necessary to implement the plan as well as the actions that would be taken to assure the availability of power or fuel during the planning period; and
- e. Identification of the personnel necessary to implement the plan, including direct labor required for paragraphs (a) (b) above, and any necessary direct supervisory personnel, as well as the actions that shall be taken to assure their availability and any required training of these personnel.
- B. No ISSMP is required for a closed Phosphogypsum Stack System, or one undergoing closure, or for which an application for a closure permit has been submitted where permitting requirements apply.

II. Assessment of existing Perimeter Dikes for Phosphogypsum Stack Systems

- A. Except for Perimeter Dikes that are Inactive and will not be put into service, or that have already been approved by the EPA or the State of Wyoming as meeting or equivalent to the criteria set forth in (2)(a) (c) below, within six (6) months of the Effective Date, Simplot shall submit to the EPA documentation that the existing Perimeter Dikes have been assessed and certified by a Third-Party Engineer that they have been:
 - Constructed or modified to address Freeboard, Perimeter Dike seepage, factors of safety, and slope stability in accordance with a permit issued by the State of Wyoming; or
 - 2. Engineered or retrofitted, to be in compliance with the following:
 - a. Cross section design
 - i. Both of the Inside⁵ and Outside⁶ slopes shall be no steeper than two horizontal to one vertical (2H:1V).
 - ii. The design shall provide positive seepage control features such as:
 - (a) Cut-off trench in natural soil foundations
 - (b) Clay core or other impermeable core material
 - (c) Blanket drain

⁵ The face of the Dike in contact with the impounded liquids.

⁶ The face of the Dike not in contact with the impounded liquids.

- (d) Chimney drain and Toe Drain
- (e) Geomembrane or composite Liner on Inside slope
- iii. The top of the Perimeter Dike and the Toe shall be accessible for maintenance and inspection.

b. Freeboard provisions

- i. The design Freeboard of an above-grade Perimeter Dike shall not be less than five (5) feet unless a Freeboard of less than five (5) feet is justified based on the results of seepage and stability analyses, incorporating the evaluations described in (b)(ii) below, or was previously approved by EPA. However, in no event shall the Freeboard of an above-grade Perimeter Dike be less than three (3) feet.
- ii. Freeboard shall be determined by generally accepted good engineering practices and shall include, at a minimum, evaluation of Wind Surge, Wave Height and Wave Run-up analysis, erosion protection measures, and protection of Dike integrity and inner rim ditch geometry.
- iii. Sustained wind speed used for the analyses listed in (b)(ii) above shall be defined as a sustained wind speed for a 10-minute duration.
- c. Design factors of safety and slope stability
 - i. <u>Stability analysis</u>. A stability analysis shall be performed. A seepage or flow net analysis shall be made, when applicable, for use in the stability analysis. The stability analysis shall consider the minimum water level as well as the water level at the design Freeboard on the upstream slope of the Perimeter Dike, and possible fluctuations of the tail water level.
 - ii. <u>Design safety factors</u>. The minimum safety factors are: 1.75 for horizontal shear at base of fill; 1.5 for horizontal shear within the fill due to seepage through the outer face; 1.5 for horizontal shear or circular arc failure through the foundation soils; and 1.5 for protection against shear failure of any circular arc in either the Inside or Outside slope. It is imperative that water pressure distribution be included in the analyses; or

- iii. Evaluation by a Third-Party Engineer who certifies the safety and stability of the Perimeter Dikes in accordance with (2)(c)(i) (ii) of this Section; or
- iv. Evaluation by a Third-Party Engineer who certifies the safety and stability of the Perimeter Dikes meets an alternate design safety factor and that this alternate design safety factor has been approved by EPA.
- B. Within nine (9) months of a final determination that the safety and stability of a Perimeter Dike cannot be certified in accordance with (2)(c)(i) (iv) of this Section, Simplot shall either: (a) submit to EPA for approval: a proposal to upgrade or retrofit the Perimeter Dike to comply with the requirements of Section II(A)(2), and any interim measures recommended by a Third-Party Engineer; or (b) take the Perimeter Dike out of service as soon as practicable but no later than ninety (90) days after a final determination that the safety and stability of a Perimeter Dike cannot be certified, and that the Perimeter Dike cannot or will not be upgraded or retrofitted to comply with the requirements of Section II(A)(2).
- C. Simplot, with any Perimeter Dike in need of upgrade, retrofit, or deservicing, shall implement EPA's approval of the proposal submitted in accordance with (B) within six (6) months or as soon as practicable, weather permitting.
- D. At the time the assessment is performed pursuant to Section II(A)(2), a Third-Party Engineer shall also determine, in writing, whether the existing Phosphogypsum Stack System is equipped with Process Wastewater conveyance/containment capabilities that conform to the following design requirements:
 - 1. Conveyance ditches, pumps, pipes, and hydraulic structures located within a Phosphogypsum Stack System shall have adequate capacity to circulate the Process Wastewater stream(s), if applicable, and to contain or transfer Run-off from the Process Watershed⁷ upstream of the water control structures resulting from the greater of a storm event from a combined peak precipitation and snow-melt event over a twenty-four (24) hour period using snowfall, precipitation and other meteorological data from a long-term historical record or a 100-year, twenty-four (24) hour

⁷ "Process Watershed" means the aggregate of all areas that contribute to or generate additional Process Wastewater from direct precipitation, rainfall Run-off, or Leachate to a Phosphogypsum Stack, Process Wastewater, Return Pond (cooling/surge ponds), collection ponds, or any other storage, collection, or conveyance system associated with the transport of Phosphogypsum or Process Wastewater for a particular Phosphogypsum Stack System.

precipitation value,⁸ while maintaining at the same time the required design Freeboard. If provisions are made to contain some of the entire storm surge resulting from such an event within the Phosphogypsum Stack System upstream from the conveyance system or water control structures, then the transfer capacity of the ditches, pumps, pipes, and related structures may be reduced accordingly.

E. Within one year of a final determination that a Phosphogypsum Stack System does not meet the design criteria of (D)(1) above, Simplot shall submit to the EPA, for approval, a proposal to modify the Phosphogypsum Stack System to attain compliance. Such modification shall be completed as soon as practicable, but not later than fourteen (14) months after Simplot receives all necessary governmental permits or approvals, whichever shall occur later.

III. Construction of New Perimeter Dikes

A. Design

- 1. <u>Site investigation</u>. The general area desired for construction of a proposed Perimeter Dike shall be carefully inspected by a Third-Party Engineer prior to selection of the exact location for the Perimeter Dike. Areas of uneven natural subsidence, sinkholes, pockets of organic matter, or other unstable soils shall be avoided, unless special provisions are made for their mitigation.
- 2. Soil testing. A program of soil sampling and adequate testing shall be performed to determine the characteristics of the foundation material that will support the proposed Perimeter Dike, and of the material to be used for construction of the Perimeter Dike.. Sampling and tests shall be determined by a Third-Party Engineer that may include borings, test pits, or in-place samples from the associated exposed excavation face. All borings and/or test pit explorations shall be logged using a recognized engineering soil classification system, with location and depths of all samples recorded on the Log. Tests shall be performed to determine inplace densities, shear-strength, and permeabilities of the foundation and embankment soils. Tests on foundation soils shall be performed either on undisturbed samples or on the in-place soil. Tests on embankment soils shall be performed on samples remolded to the densities and moisture contents to be used in construction.

⁸ See Wyoming Water Development Office's Probable Maximum Precipitation Study, December 2014 (as updated). Table 11.5 has a 100-year, 24 hour precipitation value for Western Rocky Mountains, west divide.

- 3. Cross section design. The crest on the top of the Perimeter Dike shall be graded toward the Inside Slope or the Outside Slope. If the Perimeter Dike exceeds ten (10) feet in height and crest Run-off is directed toward the Outside slope, then Run-off controls shall be used to protect the Outside Slope against erosion. Both Inside and Outside Slopes shall be no steeper than two-and-one-half (2.5) horizontal to one (1.0) vertical (2.5H:1V). Seepage control shall be provided by means of a Liner constructed in accordance with Paragraph 25(b) of the Consent Decree, Appendix 7 (Alternative Liner Demonstration), and Section VI of this Appendix, placed on the Inside Slope of the Perimeter Dike.
- 4. <u>Freeboard provisions</u>. The design Freeboard of an above-grade Perimeter Dike shall not be less than five (5) feet unless a Freeboard of less than five (5) feet is justified based on results of seepage, stability, and Wave Run-up analyses. However, in no event shall the design Freeboard of an above-grade Perimeter Dike be less than three (3) feet unless the Dike is below grade pond/ditch, then Freeboard shall not be less than (2) feet.
- 5. <u>Design factors of safety and slope stability of Perimeter Dikes</u>
 - a. <u>Stability analysis</u>. A stability analysis shall be performed. A seepage or flow net analysis shall be made, when applicable, for use in the stability analysis. The stability analysis shall consider the minimum fluid level as well as the fluid level at the design Freeboard on the upstream slope of the Perimeter Dike, and possible fluctuations of the tail water level.
 - b. <u>Design safety factors for Perimeter Dikes</u>. The minimum safety factors for Perimeter Dikes are: 1.75 for horizontal shear at base of fill; 1.5 for horizontal shear within the fill due to seepage through the outer face; 1.5 for horizontal shear or circular arc failure through the foundation soils; and 1.5 for protection against shear failure of any circular arc in either the Inside or Outside Slope. In determining design safety factors, water pressure distribution must be addressed.
- B. <u>Site preparation</u>. In accordance with specifications provided by the Third-Party Engineer, ground that will become the foundation of Perimeter Dikes shall be stripped of vegetation and organic detritus or residue, including muck, mud, slimes, or other material which would flow or undergo excessive consolidation under heavy loading. All earth foundation surfaces on which fill is to be placed shall be scarified, or moistened and

- compacted, prior to spreading a first course of fill material. The Perimeter Dike base shall be well-drained during construction, except when placing hydraulic fill.
- C. <u>Material to be used</u>. Material used for Perimeter Dikes shall be free of extraneous matter that could affect the compactibility, density, permeability, or shear strength of the finished Perimeter Dike (e.g., stumps, vegetation, trees, debris). Tailings may be used for Perimeter Dike fill when such a completed Perimeter Dike will meet the seepage and structural requirements above.
- D. Process Wastewater control design. Conveyance ditches, pumps, pipes, and hydraulic structures located within a Phosphogypsum Stack System shall have adequate capacity to circulate the Process Wastewater stream(s), and to contain or transfer Run-off from the Process Watershed upstream of the water control structures resulting from the greater of a combined peak precipitation and snow-melt event over a twenty-four (24) hour period using snowfall, precipitation and other meteorological data from the long-term historical record or a 100-year, twenty-four (24) hour precipitation value while maintaining, at the same time, the design Freeboard of the Perimeter Dike. If provisions are made to contain all or part of the storm surge resulting from such event within the Phosphogypsum Stack System upstream from the conveyance system or water control structures, then the transfer capacity of the ditches, pumps, pipes, and related structures may be reduced accordingly.

E. Methods of construction

- 1. Each new Perimeter Dike shall be constructed to meet or exceed the minimum safety requirements of this Section and the specifications and design for that Perimeter Dike. Appropriate earthmoving equipment shall be used to place materials in the Perimeter Dike. The soil shall be compacted and density tests shall be performed to ensure that the designed densities are obtained. A representative of the Third-Party Engineer shall be present on-site during construction of the Perimeter Dike and Liner, and during construction and installation of spillways and penetrations through the Perimeter Dike or Liner. The EPA shall be notified of the date on which construction of a new Perimeter Dike will begin.
- Areas around any water level control structure pipe, conduit, or surface of discontinuity between materials within the mass of the Perimeter Dike shall be carefully inspected and action taken to avoid potential concentration of seepages, and to ensure that soils under and around a culvert are uniformly compacted and are in continuous contact with the external culvert surface. All

- penetrations through the Liner on the upstream slope of the Perimeter Dike shall be made using water-tight joints or connections that shall be capable of maintaining their integrity under all in-use conditions.
- 3. All pipes and joints in pipes or conduits extending through a Perimeter Dike shall be made leak-proof and shall be constructed of materials suitable for the fluids carried and the load imposed. To avoid leaks associated with differential settlement, conduits through Perimeter Dikes shall not be rigidly supported by piles or piers. Backfill around conduits shall be of a density that is equal to or greater than that of the surrounding embankment. Particular attention shall be devoted to the lower third of the conduit.

IV. Operational requirements for Perimeter Dikes

- A. All Perimeter Dikes shall be operated to maintain the required Freeboard, unless temporary incursions into the design Freeboard are demonstrated to be safe in accordance with (B) of this Section, below. Each Perimeter Dike shall be inspected as prescribed in this document.
 - 1. Vegetative cover adequate to inhibit wind and water erosion shall be established and maintained on the Outside Slope of the Perimeter Dike. Such vegetation shall be maintained in such a manner (e.g., height and density) as to permit visual inspection; or
 - 2. In areas where historically evapotranspiration exceeds precipitation, an alternative method may be used to inhibit wind and water erosion on the Outside Slope of the Perimeter Dike. The alternative method must be certified by a Third-Party Engineer as providing erosion protection equivalent to that of a vegetative cover; and
 - The outside Toe of all operational Perimeter Dikes shall be maintained free of trees, or other woody plant growth whose roots may breach the Piping and compromise integrity of the Perimeter Dike.
- B. Temporary use of design Freeboard to prevent a release may be authorized in accordance with Appendix 1.D (Critical Conditions and Temporary Measures).
- C. A completed new Perimeter Dike shall be thoroughly inspected prior to the placement of Process Wastewater behind it. Spillways and water level control structures shall be certified by a Third-Party Engineer as meeting all specifications of the design, including the degree of compaction of the

- fill. Legible photographs, either aerial or ground, shall be used in documenting this initial inspection, but shall not in and of themselves constitute certification. A complete file describing the items inspected and their condition shall be maintained by the Facility.
- D. All Perimeter Dikes and water control structures shall be inspected weekly. Water level elevations and Freeboard compliance shall be determined as part of daily routine inspections. Piezometric water levels within the Perimeter Dike shall be measured quarterly if piezometers have been installed. The inspections shall be made by a qualified company employee or qualified contractor employed or retained by Simplot. The findings of each inspection shall be recorded in a Log.
- E. Each Perimeter Dike shall be inspected annually by a Third-Party Engineer experienced in the field of construction and operation of Perimeter Dikes. An annual report related to such an inspection shall be prepared and include recommendations and corrective measures taken. The report shall be retained by Simplot. The annual inspections shall include:
 - 1. Analyses of seepage or other significant items shown on all aerial photographs of the Perimeter Dike since the date of the last annual inspection.
 - 2. Condition of soil surfaces and top and slopes of the Perimeter Dike and in areas within fifty (50) feet downstream from the outside Toe.
 - 3. Review of all periodic inspection reports to evaluate the effectiveness of maintenance done to the Perimeter Dike during the period since the last annual inspection.
 - 4. Examination and interpretation of data obtained from any instrumentation installed in the mass of the Perimeter Dike.
 - 5. Condition of spillway and water level control structures, including all conduits exiting the Perimeter Dike.
- F. The following items shall be considered as indicating potential trouble areas that must be documented and closely monitored in subsequent inspections and repaired as necessary:

- 1. Abnormal dead vegetation or abnormal damp areas⁹ on the downstream slope, at the Toe of the slope, or downstream from the Toe of the slope that could be indicative of pond water seepage.
- 2. Surface erosion, gullying, or wave erosion on the upstream slope of the Perimeter Dike.
- 3. Surface erosion or gullying on the downstream slope of the Perimeter Dike.
- 4. Erosion below any conduit through the Perimeter Dike near or at the Toe of the slope of the Perimeter Dike.

V. Lateral Expansions of existing Phosphogypsum Stack Systems

- A. Any Lateral Expansion is considered a new Phosphogypsum Stack or Component thereof for purposes of this Section and must be constructed in accordance with the applicable requirements of Section VI.¹⁰
- B. Except for incidental deposits of Phosphogypsum entrained in the Process Wastewater, conditioned Phosphogypsum used as a cushion layer against rock slope, or Phosphogypsum Stack roadbed material, placement of Phosphogypsum outside the Phosphogypsum Stack footprint is considered a Lateral Expansion. For purposes of this Section, the footprint is defined as the outside edge of the Perimeter Dikes used to contain the placement of Phosphogypsum in the Phosphogypsum Stack.
- C. Except as provided in Appendix 1.D (Critical Conditions and Temporary Measures), Section IV (Emergency Diversion Impoundment), storage or containment of Process Wastewater outside the footprint of the Phosphogypsum Stack System is considered a Lateral Expansion of the Phosphogypsum Stack System. For purposes of this paragraph, the footprint is defined as the outside edge of the dams, Dikes or ditches used to store or contain Process Wastewater.

VI. Construction requirements for New Phosphogypsum Stacks, or Lateral Expansions of existing Phosphogypsum Stack Systems or Components

A. <u>Minimum design standards</u>. The requirements of this Section are the minimum standards for constructing the following Components of Phosphogypsum Stack Systems after the Effective Date:

⁹ Note: natural groundwater flow does occur below the Phosphogypsum Stack and such flow is observable in the cut-off ditch.

¹⁰ A vertical expansion against a slope, where there is also a horizontal expansion, shall not be considered a Lateral Expansion as long as such vertical and horizontal expansion is part of the approved design and construction plan.

- 1. New Phosphogypsum Stacks;
- 2. New Return Ponds:
- 3. New Auxiliary Holding Ponds (AHP); and
- 4. New Process Wastewater conveyances.
- B. <u>Safety factor</u>. Any new Phosphogypsum Stack or Lateral Expansion shall be designed with an overall factor of safety of 1.5 for any potential failure surface encompassing the impoundment on top of the stack and passing through the Phosphogypsum slope or bottom Liner interfaces or extending into earthen material in contact with the bottom Liner.
- C. <u>Run-on control</u>. Simplot shall install and maintain a Run-on¹¹ management system capable of preventing the greater of flow during peak discharge calculated using precipitation data from a twenty-four (24) hour, 25-year Rainfall Event¹² or from a combined peak precipitation and snowmelt event over a twenty-four (24) hour period using snowfall, precipitation and other meteorological data from a long-term historical record.
- D. <u>Run-off control</u>. Simplot shall maintain a Run-off management system to collect and control at least the greater of water volume resulting from a twenty-four (24) hour, 25-year Rainfall Event or from a combined peak precipitation and snow-melt event over a twenty-four (24) hour period using snowfall, precipitation and other meteorological data from a long-term historical record.
- E. <u>Liner and Leachate control systems</u>. Phosphogypsum Stacks shall be constructed with a Leachate control system and a composite Liner or an approved alternative as described in Appendix 7 (Alternative Liner Demonstration). The composite liner (consisting of synthetic and non-synthetic layers) is described in (2), below. AHPs shall be constructed with a High-Density Polyethylene (HDPE) Liner of 60 mils or thicker. Return Ponds shall be constructed with composite Liners or an approved alternative. Process Wastewater conveyances shall be constructed with a Liner or pipe(s).
 - 1. Phosphogypsum Stack Liners shall be:
 - Constructed of materials that have appropriate physical, chemical, and mechanical properties to prevent failure due to:

¹¹ Any rainwater, Leachate, or other liquid that drains over land from any part of a Phosphogypsum Stack System.

¹² A rainfall event which is characterized by a mean return period of twenty-five years, i.e., a rainfall which has a 96% probability for not being exceeded during any given year.

- i. physical contact with the Phosphogypsum, Process Wastewater or Leachate;
- ii. exposure to climatic conditions;
- iii. the stress of installation;
- iv. hydraulic pressures that are anticipated during the operational and closure period of the Liner system; and
- the supplier of materials for the Liner components shall provide test information accepted by the Third-Party Engineer in support of the capabilities of the materials to meet these needs.
- Installed upon a base and in a geologic setting capable of providing structural support to prevent the overstressing of the Liner due to settlements and applied stresses;
- Constructed so that the bottom of the Liner system is not subject to fluctuations of the Groundwater, so as to adversely impact the integrity of the Liner system;
- d. Designed to resist hydrostatic uplift if the Liner is located below the seasonal high Groundwater Table; and
- e. Installed to cover all surrounding earth that could come into contact with the Phosphogypsum, Process Wastewater or Leachate.
- 2. Phosphogypsum Stack Liner design standards
 - a. Phosphogypsum Stacks shall be constructed atop a composite Liner or an approved alternative pursuant to Paragraph 25 of the Consent Decree and Appendix 7.
 - b. The synthetic component of composite Liners shall consist of a 60-mil or thicker HDPE or equivalent Geomembrane with a maximum water vapor transmission rate of 0.24 grams per square meter per day as determined by the American Society for Testing and Materials (ASTM) Method E96- 80, procedure BW, "Test Methods for Water Vapor Transmission of Materials;" Sections 04.06, 08.03 and 15.09, which document is incorporated herein by reference (and any updates thereof).

- c. The non-synthetic component of composite Liners shall consist of one of the following:
 - i. <u>Soil</u>. A layer of compacted soil at least eighteen (18) inches thick, placed below the Geomembrane, with a maximum hydraulic conductivity of 1 x 10⁻⁷ centimeters per second, constructed in six-inch lifts. The Geomembrane layer shall be installed in direct and uniform contact with the compacted soil component to retard Leachate migration if a leak in the Geomembrane should occur. Soil materials used within the top twelve (12) inches of the compacted soil layer immediately below the Geomembrane shall be free from rigid or sharp objects that could damage or otherwise affect the integrity of the Liner. The soil layer component may consist of in-situ soils or compacted imported soils, provided they meet the specifications in 4(d) below for soil components of composite Liners; or
 - ii. Phosphogypsum. A layer of mechanically compacted Phosphogypsum at least twenty-four (24) inches thick, placed above the Geomembrane, with a maximum hydraulic conductivity of 1 × 10⁻⁴ centimeters per second. No rigid or sharp objects that could damage the Liner may be placed within this compacted layer of Phosphogypsum. A layer of compacted Phosphogypsum is not required for any vertical expansion and/or natural ground slopes steeper than 2.5H:1V abutting a vertical or horizontal expansion where Phosphogypsum slurry is discharged into the expansion area within one (1) year of completion of construction as described in Appendix 7.
- d. Pursuant to Paragraph 25(b) of the Consent Decree, the non-synthetic layer of a Phosphogypsum Stack composite Liner will not be required for vertical expansions under the following conditions:
 - i. Where it has been demonstrated to and approved by the EPA that a synthetic Liner alone or in contact with sedimented Phosphogypsum placed in slurry form will be equivalent or superior to a composite Liner designed and installed in accordance with the requirements of Section VI; or
 - ii. Where it has been demonstrated to and approved by the EPA that a synthetic Liner in contact with sedimented

Phosphogypsum placed in slurry form is equivalent or superior to a composite Liner with twenty-four (24) inches of compacted Phosphogypsum placed above the Geomembrane.

Appendix 7 provides for an alternative liner demonstration.

e. Pursuant to Paragraph 25(b) of the Consent Decree, the non-synthetic layer of a Phosphogypsum Stack composite Liner will not be required for Lateral Expansions where it has been demonstrated and certified by a Third-Party Engineer and approved by the EPA that a synthetic Liner in contact with sedimented Phosphogypsum placed in slurry form, and with consideration of the physical hydrogeological setting of the specific lateral expansion, provides an equivalent or superior degree of protection for human health and the environment, designed and installed in accordance with the requirements of this Section VI.

Appendix 7 provides for an alternative liner demonstration.

- 3. Any proposed composite Liner design or alternative Liner demonstration shall be accompanied by a detailed construction quality assurance/quality control plan, describing in detail how the design will be properly constructed in the field. For composite Liners using compacted Phosphogypsum, the quality assurance plan shall emphasize the protection of the Geomembrane during placement and compaction of the Phosphogypsum, and on prompt placement of the Phosphogypsum on the Geomembrane. The construction quality assurance/quality control plan must be submitted to the EPA for approval.
- 4. The following Liner design standards must be met:
 - a. Standards for geosynthetic layers.
 - i. Geomembranes shall have factory and field seams whose shear strengths during testing are at least ninety percent (90%) of the specified minimum yield strength for that lining material, and the failure shall occur in the lining material outside the seam area. All field seams must be visually inspected and pressure or vacuum tested for seam continuity using suitable non-destructive techniques.

- ii. No large or rigid objects may be placed in the Phosphogypsum Stack System in a manner that may damage the Liner or Leachate collection system and, with the exception of Liners installed at the Toe of the Phosphogypsum Stack, in no case shall such objects be placed within ten (10) vertical feet of the Liner or Leachate collection system, unless approved by the EPA.
- iii. HDPE Geomembranes shall meet the specification contained in method GRI GM13 or updates thereof.
- iv. Polyvinyl chloride (PVC) Geomembranes shall meet the specification contained in method PGI 1197 or updates thereof.
- v. Interface shear strength of the actual components that will be used in the Liner system shall be tested with method ASTM D5321 or an equivalent test method.
- vi. In addition, the synthetic Liner material shall be subjected to continuous spark testing or an industry-accepted equivalent test at the production facility prior to delivery to the site for installation. If the continuous spark or equivalent testing detects any defect, then the tested material must be rejected and not used at the site.
- b. Soil layer of composite Liners
 - i. Shall be constructed to preclude, to the greatest extent practicable, lenses, cracks, channels, root holes, pipes, or other structural inconsistencies that can increase the saturated hydraulic conductivity of the soil component. The design shall illustrate and describe those instances in which over-excavation of permeable areas and backfilling may be necessary to seal the permeable area. The soil layer shall be placed and compacted in layers to achieve the design performance;
 - ii. The permeability shall not be increased above the values specified for the layer, as a result of contact with Leachate from the Phosphogypsum Stack System. Compatibility of the soil layer and Leachate shall be demonstrated by testing the soil layer with actual or simulated Leachate in accordance with EPA Test Method 9100 or an equivalent test method approved by EPA.

- iii. The soil layer of the Liner system may consist of in-situ soils or compacted imported soils, provided they meet the specifications for Soil Liners.
- iv. Specifications for the soil layer of the Liner system shall contain at a minimum:
 - (a) Allowable range of particle size distribution and Atterberg limits, to include shrinkage limit;
 - (b) Placement moisture criteria and dry density criteria;
 - (c) Maximum laboratory-determined saturated hydraulic conductivity, using simulated Leachate as the saturating and testing liquid;
 - (d) Minimum thickness of the Soil Liner;
 - (e) Lift thickness;
 - (f) Surface preparation (scarification) for tying lifts together; and
 - (g) Type and percentage of clay mineral within the soil component.
- c. The Soil Liner shall be placed using construction equipment and procedures that achieve the required saturated hydraulic conductivity and thickness. A field test section shall be constructed using the proposed construction equipment that will be used to install the Soil Liner and tested to document that the desired saturated hydraulic conductivity and thickness is achieved in the field.
- 5. A completed new Phosphogypsum Stack System, including the Starter Dike, shall be thoroughly inspected by a Third-Party Engineer prior to the deposition of Process Wastewater in it. The Liner, spillways, degree of compaction of the fill, and the water level control structures shall be certified by a Third-Party Engineer. Legible photographs, either aerial or ground, may be used to document this initial inspection, but shall not in and of themselves constitute certification. A complete file describing the items inspected and their condition shall be made available to the State of Wyoming and/or EPA upon request.
- 6. <u>Exceptions</u>. No person shall dispose of, or store prior to disposal, any Phosphogypsum except within a permitted Phosphogypsum Stack System, in states where permitting requirements apply. This provision shall not be construed to prohibit any use or reuse of Phosphogypsum not otherwise prohibited by law.

VII. Liner system construction quality assurance/control plans

- Construction quality assurance/quality control plan. Liner systems shall Α. have a construction quality assurance/quality control plan to provide personnel with adequate information to achieve continuous compliance with the Liner construction requirements. This plan shall include or refer to project specifications and construction methods that use good engineering practices to construct a Liner system and provide for quality control testing procedures and sampling frequencies. Sampling and testing shall be conducted in the field by trained personnel during and after construction is completed. Such personnel shall be under the direction of a Third-Party Engineer to ensure that the Liner system will comply with the standards. The Third-Party Engineer or his qualified designee shall be on-site, at all times, during construction to monitor construction activities. Construction activities include the time during which the protective layer is installed over the Geomembrane to ensure that the placement techniques do not cause damage to the Liner system materials.
- B. The Liner system construction quality assurance/quality control plan shall comply with EPA Document EPA/600/R-93/182, and updates thereof shall be presumed to be in compliance with this Section. The following minimum specific elements shall be included in the plan:
 - 1. Responsibility and authority of all organizations and key personnel involved in permitting, designing, constructing, and providing construction quality assurance/quality control of the Phosphogypsum Stack Liner, Phosphogypsum Stack System Liners, or Component Liners shall be described fully;
 - 2. Minimum qualifications of the Third-Party Engineer, his qualified designee(s) and supporting personnel shall be documented in the plan to demonstrate the requisite training and experience necessary to fulfill their identified responsibilities;
 - 3. Procedures and tests that will be used to monitor the installation of the Liner system components shall be described in detail;
 - The sampling activities, sample size, sample locations, frequency
 of testing, acceptance and rejection criteria, and plans for
 implementing corrective measures that may be necessary shall be
 described; and
 - 5. Reporting requirements for construction quality assurance/quality control activities shall be described, including daily summary

- reports, observation data sheets, problem identification and corrective measures, and final documentation.
- 6. All such documents shall be included in a final report.
- C. A laboratory experienced in the testing of Geomembranes, independent of the Liner manufacturer and installer, shall perform the required testing that must include, at a minimum, conformance testing for all Geomembranes, and testing of seam shear and peel strength for all Geomembranes.
- D. The Third-Party Engineer in charge of construction quality assurance/quality control plans shall provide a signed, sealed final report and record drawings stating that the Liner system has been installed in conformance with the plans and specifications and identifying any deviations.
- E. <u>Soil Liner construction quality assurance/quality control plan</u>. In addition to the requirements of (A-D) of this Section, the following requirements apply to construction of the soil layer of Liner systems. All required testing and analysis shall be performed in accordance with generally accepted engineering procedures, such as those promulgated by the ASTM. Parenthetic references to ASTM methods are intended as guidance only.
 - 1. The construction quality assurance/quality control plan shall include a section specifying the performance criteria for the Soil Liner and providing quality control testing procedures and minimum sampling frequencies. In addition, the construction quality assurance/quality control plan shall define the responsibilities of the parties that will be involved in Soil Liner construction and shall present minimum qualifications of each party to fulfill their identified responsibilities.
 - 2. Field and laboratory testing during Soil Liner construction shall be conducted by a qualified field technician representing Simplot. The field technician shall work under the supervision of a Third-Party Engineer with experience in Soil Liner construction.
 - 3. If applicable and prior to Soil Liner installation, an appropriate borrow source shall be located. Suitability of the Soil Liner construction materials from that source shall be determined in accordance with the following:
 - a. If demonstrated field experience is available from at least three (3) prior successful projects of five (5) or more acres each to document that a given borrow source can meet the requirements of the project specifications, then extensive laboratory testing of the borrow source will not be required.

Additionally, the source of material shall be geologically similar to and the methods of excavating and stockpiling the material shall be consistent with those used on the prior projects. Furthermore, a minimum of three (3) representative samples of the appropriate thickness from the in-situ stratum or from stockpiles of the borrow material proposed for Soil Liner construction shall be submitted to an independent soil testing laboratory to document through index testing that the proposed material is consistent with the material used on prior successful projects. At a minimum, index testing shall consist of percent fines, Atterberg limits and moisture content determinations.

- If the above demonstrated field experience is not available or cannot be documented, then the following requirements shall be met:
 - i. A field exploration and laboratory testing program shall be conducted by an independent soil testing laboratory to document the horizontal and vertical extent and the homogeneity of the soil strata proposed for use as Soil Liner material. A sufficient number of index tests from each potential borrow stratum shall be performed to quantify the variability of the borrow materials and to document that the proposed borrow material complies with project specifications. At a minimum, the index tests shall consist of percent fines, Atterberg limits and moisture content determinations.
 - ii. Sufficient laboratory hydraulic conductivity tests shall be conducted on samples representative of the range in variability of the proposed borrow source (ASTM D-5084). For each such sample, test specimens shall be prepared and tested to cover the range of molding conditions (moisture content and dry density) required by project specifications. The hydraulic conductivity tests shall be conducted in triaxial type permeameters. The test specimens shall be consolidated under an isotropic consolidation stress no greater than ten (10) pounds per square inch and permeated with water under an adequate backpressure to achieve saturation of the test specimens. The inflow to and outflow from the specimens shall be monitored with time and the hydraulic conductivity calculated for each recorded flow increment. The test shall continue until steady state flow is achieved

- and relatively constant values of hydraulic conductivity are measured (ASTM D-5084).
- iii. The borrow source shall only be considered suitable if the hydraulic conductivity of the material, as documented on laboratory test specimens, can be shown to meet the requirements of the project specifications at the ninetyeight percent (98%) confidence level.
- iv. Amended soil (in-situ or imported) considered for use shall meet the same standards.
- c. Prior to full-scale Soil Liner installation, a field test section or test strip shall be constructed at the site above a prepared sub-base. The field test section or test strip will only be considered acceptable if the measured hydraulic conductivities of undisturbed samples from the field test section or test strip meet the requirements of the project specifications at the ninety-eight percent (98%) confidence level. Field test sections or test strips shall be constructed in accordance with the following requirements:
 - The test section or test strip shall be of sufficient size such that full-scale Liner installation procedures can be duplicated within the test section;
 - ii. The test section shall be constructed using the same equipment for spreading, kneading and compaction. This includes the same construction procedures (e.g., number of passes, moisture addition and homogenization, if needed) that are anticipated for use during full-scale Liner installation:
- d. At a minimum, the Liner test section shall be subject to the following field and laboratory testing requirements:
 - A minimum of five (5) random samples of the Soil Liner construction material delivered to the site during test section or test strip installation shall be tested for moisture content (ASTM D-2216), percent fines (ASTM D- 1140) and Atterberg limits (ASTM D-4318);
 - ii. At least five (5) field density and moisture determinations shall be performed on each lift of the compacted Soil Liner test section;

- iii. Upon completion of the field test section, the thickness of the lift shall be measured at a minimum of five (5) random locations to check for thickness adequacy; and
- iv. A minimum of five (5) Shelby tubes or drive cylinder (ASTM D-2937) samples shall be obtained from each lift of the field test section for laboratory hydraulic conductivity testing. Laboratory hydraulic conductivity testing shall be conducted in triaxial type permeameters (ASTM D-5084). The test specimens shall be consolidated under an isotropic consolidation stress no greater than ten (10) pounds per square inch and permeated with water under an adequate backpressure to achieve saturation of the test specimens. The inflow to and outflow from the specimens shall be monitored with time and the hydraulic conductivity calculated for each recorded flow increment. The test shall continue until steady state flow is achieved and relatively constant values of hydraulic conductivity are measured (ASTM D-5084). Alternatively, a sealed double-ring infiltration field test (ASTM D3385) may be used as an alternative to drive cylinder or Shelby tube samples.
- e. Full scale Soil Liner installation may begin only after completion of a successful Soil Liner field test section. During Liner construction, documentation of quality control testing shall be maintained and made available to the EPA upon request, to document that the installed Liner conforms to approved project specifications. The testing frequencies for quality control testing are specified below; however, during construction of the first five (5) acres of the Liner, these frequencies shall be doubled. Samples shall be obtained from random locations selected by a Third-Party Engineer. If there are indications of a change in material properties, product quality or construction procedures during Liner construction, then additional tests shall be performed to determine compliance.
- F. <u>Field testing during Liner system installation</u>. The following field tests shall be performed:
 - 1. Prior to the laying of the Liner materials, and, if applicable, the Liner sub-base shall be compacted to the specified density. Density tests shall be conducted at a minimum rate of two tests per acre:

- A minimum of two (2) moisture content and field density determinations shall be conducted per acre per lift of the compacted Liner. The degree of compaction shall be checked using the one-point field Proctor test or other appropriate test procedures; and
- b. A minimum of four (4) thickness measurements shall be conducted per acre per lift of the compacted Liner.
- G. <u>Laboratory testing during Liner installation</u>. The following laboratory tests shall be performed:
 - Percent fines (ASTM D-1140) of the Liner construction material shall be determined at a minimum frequency of two (2) tests per ace per lift of installed Liner;
 - 2. Atterberg Limits determinations shall be performed on one (1) sample per acre per lift of installed Liner; and
 - 3. Hydraulic conductivity testing of Shelby tube or drive cylinder (ASTM D-2937) samples of the compacted Liner shall be performed at a minimum frequency of one (1) test per acre per lift. Laboratory hydraulic conductivity tests shall be conducted in triaxial type permeameters (ASTM D-5084). The test specimens shall be consolidated under an isotropic consolidation stress no greater than ten (10) pounds per square inch and permeated with water under an adequate backpressure to achieve saturation of the test specimens. The inflow to and outflow from the specimens shall be monitored with time and the hydraulic conductivity calculated for each recorded flow increment. The test shall continue until steady state flow is achieved and substantially constant values of hydraulic conductivity are measured.
 - a. If the test data from a Liner section does not meet the requirements of the project specifications, then additional random samples may be tested from that Liner section. If such additional testing demonstrates that the thickness and hydraulic conductivity meet the requirements of the project specifications at the ninety-five percent (95%) confidence level, then that Liner section will be considered acceptable. If not, then that Liner section shall be reworked or reconstructed so that it does meet these requirements.

H. Leachate control system standards

- A perimeter underdrain system designed to stabilize the side slopes of the Phosphogypsum Stack shall be installed above the Geomembrane Liner.
- 2. Perimeter drainage conveyances used in the Leachate control system shall either consist of covered or uncovered ditches that are lined continuously with the Phosphogypsum Stack Liner, or of chemically compatible Leachate collection pipes. Covered ditches shall have maintenance manholes installed at appropriate intervals. Piped systems shall have manholes or appropriate cleanout structures at appropriate intervals unless the Third-Party Engineer certifies and identifies areas where manholes or cleanout structures in piped systems are not feasible.
- 3. All Toe Drain or Leachate collection systems must be constructed within the lined system.

I. Liquid containment and conveyance systems

- HPDE Liners shall be used on all liquid containments and conveyances associated with Phosphogypsum transport, cooling water, and return of Process Wastewater. Exceptions are pumped flow systems contained in pipes or alternative systems that provide an equivalent degree of protection as certified by a Third-Party Engineer.
- 2. Pump and Piping systems associated with the transport of Phosphogypsum or Process Wastewater that cross Surface Waters of the State must be double contained with chemically compatible materials in a manner that assures that all materials under pumped flow are contained within a lined system in the event of a leak or piping system failure.

VIII. Requirements for Actively Operated/Inactive Phosphogypsum Stacks, Phosphogypsum Stack Systems or Components of Phosphogypsum Stack Systems

A. All Active Phosphogypsum Stack Systems or Components thereof shall be inspected daily, including any noted areas containing critical conditions, (as defined in (3) below), until corrected. Inactive Phosphogypsum Stack compartments, Phosphogypsum Stack slopes, collection ditches and drain outlets shall be inspected at least weekly. At accessible locations that are

not submerged, flow from drain outlets shall be checked quarterly. ¹³ The total areal coverage of Process Wastewater on the Phosphogypsum Stack shall be estimated each month, and the total water inventory on top of the Phosphogypsum Stack shall be estimated annually. The required inspections and estimates shall be carried out by a qualified company employee or contractor employed by Simplot. The results of the required inspections and estimates shall be recorded in a Log maintained by Simplot.

- B. Where a leak detection system exists, the amount of liquid removed from any such system must be recorded weekly.
- C. Each Phosphogypsum Stack System shall be inspected within one year of the Effective Date and annually thereafter by a Third-Party Engineer with experience in the field of construction and operation of Phosphogypsum Stacks. This inspection shall also include an annual inspection of the associated Perimeter Dike. This annual inspection shall be recorded in a report and include an updated aerial photograph, state the area of the top of the Phosphogypsum Stack, and the current height and elevation of the Phosphogypsum Stack. The annual inspection report shall include recommendations and corrective measures taken as required by (D) below. If corrective measures are not completed by the time of annual submittal, then follow up inspections shall be conducted by the Third-Party Engineer on a quarterly basis with quarterly project reports submitted until completion of all corrective measures. One copy of the annual inspection report shall be submitted to the EPA.
- D. In addition to the indicators set forth in Appendix 1.D (Critical Conditions and Temporary Measures), the following items shall be considered among those indicating potential trouble areas that must be documented and closely checked on subsequent inspections and repaired and/or addressed as necessary:
 - Concentrated seepage (e.g., springs or boils) on the face of a Phosphogypsum Stack or at the Toe of the slope without active signs of Piping at the point of seepage.
 - 2. Previously observed localized sloughing at the Toe of the slope of the Phosphogypsum Stack.
 - 3. Previously observed cracks in the surface of the slope or crest of the Phosphogypsum Stack.

¹³ If flows can be measured, they will be measured. Otherwise, a notation will be made as to whether flow can be seen or not; if flow is not measured but can be seen, then qualitatively assessed: low, moderate or high flow.

- 4. Non-flowing or noticeable diminishing drains, and if so, determine the cause and take appropriate action.
- 5. Observed or suspected damage to the Liner system where there is a release or the potential for a release from the Liner system.
- E. <u>Phosphogypsum Stack System operation plans</u>. The following items shall be included in the operation plan for each Phosphogypsum Stack System and shall be approved by a Third-Party Engineer experienced in the construction and operation of Phosphogypsum Stacks:
 - 1. The method used to raise and operate the Phosphogypsum Stacks;
 - 2. A description of the source and consistency of Phosphogypsum used in constructing the Gypsum Dikes and the method used for shaping and/or mechanically working the Phosphogypsum;
 - 3. The overall average exterior slope for raising the Phosphogypsum Stack and the maximum design height of the Phosphogypsum Stack;
 - 4. The procedures used to assure that pipes used to transport Phosphogypsum to the Phosphogypsum Stack System and to return Process Wastewater to the phosphoric acid or fertilizer production facilities are operated and maintained in a safe manner;
 - 5. The procedures used to decant Process Wastewater from the top of the Phosphogypsum Stack;
 - 6. The location of pumps, spillways, and staff gauges; and
 - 7. Provisions that describe emergency measures to be taken in the event of mechanical failure of a pump, or in the event of a power failure, for any portion of a Phosphogypsum Stack System that relies on pumps or power to operate monitoring equipment or to transfer Process Wastewater and/or precipitation Run-off from low areas to the main Return Pond. Such emergency provisions shall, at a minimum, include:
 - a. Back-up power (e.g., on-site power, diesel generator, etc.) and/or back-up pump that would be activated in the event of electrical or mechanical failure; or
 - b. Sufficient surge storage capacity or emergency surge capacity within the conveyance system to contain the Process Wastewater stream(s) as well as Run-off from the

- greater of a storm event generating a combined peak precipitation and snow-melt event over a twenty-four (24) hour period using snowfall, precipitation and other meteorological data from the long-term historical record or a 100-year, twenty-four (24) hour precipitation value; or
- c. Increased inspection frequencies or continuous monitoring (e.g., remote video camera or automatic water level control device tied to a warning system) to provide early warning of an imminent spill prior to its occurrence; and an emergency action plan that would be undertaken to prevent or contain an accidental spill.
- 8. Site-specific water management plan. A site-specific water management plan shall be prepared as part of the required operation plan within six (6) months of the Effective Date, and shall be updated annually to reflect changes in Process Watershed area. available surge capacity, projected water balances and use of any Emergency Diversion Impoundment(s) (EDI) (see Appendix 1.D, Section IV). Simplot shall address in the plan the possibility and/or feasibility that one or more Component areas of the Phosphogypsum Stack System may be closed or otherwise removed from the Phosphogypsum Stack System to reduce the watershed and projected Process Wastewater inventory based on all relevant factors, including: (i) the five (5) year water balance analysis as set forth in (F) below; (ii) whether the removal of any Component areas can be done without compromising plant operations; or (iii) the operability or integrity of the Phosphogypsum Stack System, the effect of any potential removal areas on the operability of the Phosphogypsum Stack System prior to permanent closure, and any legal or regulatory requirements. The updated plan shall be consistent with any water quality-based effluent limits applicable to the Facility. This plan shall specify, at a minimum, a set of specific actions, including minimum Process Water consumption and transfer rates, that are determined to be necessary based on water balance model results for the precipitation scenarios described in subsection (F) below, or when the storage volume, surge capacity or operational Freeboard of the Return Ponds are determined to be inadequate to contain the precipitation from the greater of a storm event generating a combined peak precipitation and snow-melt event over a twentyfour (24)-hour period using snowfall, precipitation and other meteorological data from the long-term historical record or a 100year, twenty-four (24) hour precipitation value. This analysis will be updated every five (5) years. The site specific-water management plan and annual updates thereof shall be submitted to the EPA.

- 9. The adequacy of the Facility's site-specific water management plan and emergency measures shall be based on a five (5)-year water analysis as set forth in (F) below.
- F. Water balance analysis. The water balance analysis for the site-specific water management plan shall use the first day of the month that succeeds the month of the year with the highest long-term average precipitation total as the beginning date for the analysis, unless the EPA approves the use of an alternate beginning date where a larger volume of precipitation or water accumulation (such as snowmelt) is expected. The analysis shall identify the rates of all water inputs and outputs, any manufacturing production changes, and changes in the Process Watershed area identified in the analysis. A Third-Party Engineer shall verify the accuracy of the analysis. A summary of the analysis and the water balance analysis results shall be included in the annual updated site-specific water management plan required in (8) above.
 - 1. The water balance calculations shall be performed based on data from the Wyoming Water Development Office's Probable Maximum Precipitation Study, December 2014, as updated.¹⁴
 - 2. The water balance analysis for any Phosphogypsum Stack System shall indicate whether the system storage will be less than any of the following water balance targets:
 - a. At the beginning of the snowy or rainy season, the calculated 100-year, twenty-four (24) hour precipitation event plus one-half the value for the 25-year, twenty-four (24) hour rainfall event calculated (in inches) for the area where the Facility is located:
 - At the end of the snowy or rainy season, the calculated longterm or 100-year, twenty-four (24) hour precipitation event calculated (in inches) for the area where the Facility is located; or
 - c. Water levels that exceed impoundment Maximum Design Levels¹⁵ at any time during a year.
 - 3. If the water balance for any Phosphogypsum Stack System indicates that system storage is less than the water balance

¹⁴ Table 11.5 of this document has a 100-year, 24-hour precipitation value.

¹⁵ The engineer-certified maximum water elevation that an impoundment is designed to contain, without failure or overtopping, as determined using generally accepted good engineering practices with appropriate factors of safety.

- targets, Simplot must provide reasonable assurance that additional Process Wastewater consumption or management items, not already included as outputs in the water balance analysis, are readily available and capable of maintaining these water balance targets. Use of available storage within an AHP, up to its Maximum Design Levels, may be used to provide this assurance.
- 4. If the water balance indicates that at any time during the five (5)year modeling period that Process Wastewater levels, in
 conjunction with available Process Wastewater consumption or
 management, will not meet the water balance targets, Simplot must
 provide additional Process Wastewater consumption or
 management. Simplot shall also submit an alternative plan and
 implementation schedule for approval by EPA for the additional
 consumption or management measures within ninety (90) days of
 submittal of the water balance analysis. The plan and schedule
 shall include, at a minimum, the following elements:
 - A listing and description of the additional Process
 Wastewater consumption or management to be evaluated, including the identification of items that can be rapidly implemented to achieve the water balance targets;
 - A list of interim measures that can be implemented to prevent an unpermitted release of Process Wastewater in the event that actual precipitation events contribute to Process Wastewater levels exceeding Maximum Design Levels; and
 - c. A proposed schedule for the evaluation, selection, engineering, design, construction, installation or implementation of the items and interim measures needed to increase water consumption, reduce inventories, or any combination of such actions that will result in achievement of the water balance targets.

IX. Contingency plans for operating Phosphogypsum Stack Systems

A. <u>Contingency plan</u>. Except for Phosphogypsum Stack Systems for which a contingency plan already exists, within six (6) months of the Effective Date, Simplot shall prepare a contingency plan to address unplanned releases of Process Wastewater. All contingency plans shall be updated (as necessary) on an annual basis. The elements of such a plan shall address the applicable elements of the "National Response Team's Integrated Contingency Plan Guidance," 61 Fed. Reg. 28,641 (June 5, 1996), which is incorporated herein by reference, and shall include plans

- necessary to respond to emergency situations. The contingency plan shall be maintained at the Facility and be available for inspection by EPA upon request.
- B. <u>Training</u>. Simplot shall provide annual training regarding the inspection and operations requirements contained in the contingency plan to appropriate personnel. Newly hired personnel shall receive such training prior to engaging in inspection or operations activities. A training plan consistent with the requirements of contingency plan shall be maintained at the Facility and be available for inspection upon request. Records demonstrating that appropriate personnel have received the necessary training shall be maintained in accordance with Paragraph 74 of the Consent Decree.

Simplot Rock Springs Consent Decree Appendix 1.C

APPENDIX 1.C

CLOSURE OF PHOSPHOGYPSUM STACKS/ PHOSPHOGYPSUM STACK SYSTEMS/ COMPONENTS

- I. Applicability Closure of Phosphogypsum Stacks/Phosphogypsum Stack Systems/Components of a Phosphogypsum Stack System
 - A. The requirements of this Section apply only to a Phosphogypsum Stack, Phosphogypsum Stack System, or Component thereof that has not already undergone permanent closure approved by Wyoming DEQ. If only a portion of a Phosphogypsum Stack System (e.g., lower side slopes) has undergone permanent closure approved by Wyoming DEQ, then only that permanently closed portion of the Phosphogypsum Stack System is released from the requirements of this Section. Any Component that has been closed after 2005 shall be subject to the Long-Term Care provisions of Section VI.
- II. General Requirements for the Phosphogypsum Stack System Closure Plans
 - A. <u>Applicability</u>. The following requirements apply to a Phosphogypsum Stack, Phosphogypsum Stack System, or Component thereof.
 - 1. <u>Initial Closure Plan</u>. The approved Initial Closure Plan is attached as Appendix 8 (Initial Closure Plan for the Facility), and meets the requirements set forth in Appendix 2 (Financial Assurance), Section II (1)(a). Any update to the Initial Closure Plan must include the following requirements:
 - 2. <u>Physical Configuration</u>. A description of the physical configuration of the Phosphogypsum Stack System for that period of time for which a Cost Estimate has been prepared in accordance with Appendix 2.
 - 3. <u>Site-Specific Water Management Plan.</u> A site-specific water and sludge management plan describing the procedures to be employed during closure of the Phosphogypsum Stack System to manage the anticipated volume of Process Wastewater and Leachate. The Closure Plan shall address the anticipated ponded water inventory at the beginning of the closure period, anticipated closure sequence, water balance during the closure period, Phosphogypsum Stack drainage during the closure period and Long-Term Care period, adequacy of available surge storage capacity through the closure period, treatment, evaporation or consumption rate (including neutralization, if applicable), and disposition of ponded Process Wastewater and Leachate, both during the Phosphogypsum Stack System closure period and Long-Term Care activities.

- 4. <u>Cost Estimate</u>. Simplot shall submit a Cost Estimate in accordance with the requirements in Appendix 2, Section II.
- 5. A description of all construction work necessary to properly undertake Phosphogypsum Stack System Closure.

III. Permanent Closure Requirements for Phosphogypsum Stacks/Stack Systems

- A. <u>Notification and Closure Application</u>. At least ninety (90) days before the permanent deactivation of a Phosphogypsum Stack System or within thirty (30) days following a decision to permanently cease operations, whichever is later, Simplot shall notify the Wyoming DEQ and EPA. Within two-hundred-and-seventy-five (275) days of the notification, Simplot shall submit for approval a closure application (Appendix 1.E), including a Permanent Phosphogypsum Stack System Closure Plan ("Permanent Closure Plan"), to EPA and Wyoming DEQ, as described below.
- B. <u>Permanent Closure Plan</u>. The Permanent Closure Plan shall satisfy the requirements of this Section or shall contain an explanation of why the requirements are not applicable. Valid information on record in an existing permit or approved Groundwater monitoring plan may be used to satisfy the applicable requirements of this Section.
- C. <u>General information report</u>. This report must be submitted for approval to EPA and Wyoming DEQ, and shall contain:
 - 1. Identification of the Phosphogypsum Stack System;
 - 2. Name, address and phone number of primary contact persons;
 - 3. Identification of persons or consultants preparing this report;
 - 4. Present property owner and Phosphogypsum Stack System operator;
 - 5. Location by township, range and section and latitude and longitude of the Phosphogypsum Stack System;
 - 6. Total acreage of the Phosphogypsum Stack System;
 - Map of the property as set forth in Appendix 3 (Site Maps); and
 - 8. History of the Phosphogypsum Stack System, including construction dates and a general description of operations.
- D. <u>Area information report</u>. This report details the area in which the Phosphogypsum Stack System is located. The report must use verifiable information. The term "area" means that area that may affect or be affected by

the Phosphogypsum Stack System, and at a minimum includes the land within a one-mile radius of the Phosphogypsum Stack System. The report shall be supplemented by maps and cross-section drawings. The following topics shall be addressed in the report:

- 1. Topography;
- 2. Hydrology, including Surface Water¹ drainage patterns and hydrologic features such as Surface Waters, springs, drainage divides and wetlands;
- 3. Geology, including the nature and distribution of lithology, unconsolidated deposits, major confining units and sinkholes;
- 4. Hydrogeology, including depth to Groundwater Table, Groundwater flow directions, recharge and discharge areas used by public and private wells within one mile of the Phosphogypsum Stack System;
- 5. Groundwater and Surface Water quality; and
- 6. Land use information. The report shall include a discussion and maps indicating:
 - a. Identification of adjacent landowners;
 - b. Zoning;
 - c. Present land uses; and
 - d. Roads, highways, rights-of-way, or other easements.
- E. <u>Groundwater monitoring plan</u>. The Groundwater monitoring plan and most recent report submitted to Wyoming DEQ.
- F. Assessment report of the effectiveness of existing Phosphogypsum Stack System design and operation. Based on the area information report and the Groundwater monitoring plan, a written assessment shall be prepared that discusses the effects of the Phosphogypsum Stack System on adjacent Groundwater and Surface Waters, and the Phosphogypsum Stack System area. Specific concerns to be addressed are:
 - 1. Effectiveness and results of the Groundwater monitoring plan; and
 - 2. Effects of Surface Water runoff, drainage patterns, and existing storm water controls.

¹ See definition of "Surface Waters of the State" in Appendix 9.

- G. <u>Performance standards</u>. The Permanent Closure Plan shall be developed to address the following performance standards.
 - 1. Phosphogypsum Stack System Closure shall be designed to protect human health and the environment by:
 - a. Controlling, minimizing or eliminating the post closure escape of Phosphogypsum, Process Wastewater, Leachate, and contaminated runoff to Groundwater and Surface Waters;
 - Minimizing stack infiltration other than allowed Process
 Wastewater recirculation as described in Appendix 8 (Initial Closure Plan);
 - c. Being compatible with any required Groundwater or Surface Water Corrective Action Plan; and
 - d. Minimizing the need for further maintenance.
- H. A Permanent Closure Plan for Phosphogypsum Stacks, Phosphogypsum Stack Systems or Components thereof shall include a Final Cover designed to protect human health and the environment by:
 - 1. Promoting drainage off the Phosphogypsum Stack;
 - 2. Minimizing ponding, if necessary;
 - 3. Minimizing erosion;
 - 4. Minimizing infiltration into the Phosphogypsum Stack (except as allowed through Process Wastewater recirculation and evaporation); and,
 - 5. Functioning with little or no maintenance.
- I. Closure of ponds and drainage conveyances storing Process Wastewater and Leachate shall be designed to protect human health and the environment by:
 - 1. Treating or removing from the ponds and drainage conveyances all Process Wastewater and Leachate through:
 - a. The return of the Process Wastewater and Leachate to the manufacturing process; or
 - b. Returning Process Wastewater and Leachate to the Phosphogypsum Stack for evaporation; or,

- c. Transfer of Process Wastewater and Leachate to another pond permitted in accordance with this Appendix; or
- d. In-situ treatment of the Process Wastewater and Leachate, or
- e. Treatment and subsequent discharge of the Process Wastewater and Leachate under an appropriate discharge permit.
- 2. Placing any Phosphogypsum and/or sludges removed from a pond, settling basin, or drainage conveyance into an Active Phosphogypsum Stack operated in accordance with this Section or an Inactive Phosphogypsum Stack undergoing Phosphogypsum Stack System Closure in accordance with this Section. The Permanent Closure Plan shall contain a detailed description of procedures for removing and/or treating the Phosphogypsum and/or sludges, methods for sampling and testing surrounding soils and criteria for determining the extent of removal required to satisfy the closure performance standards.
- J. <u>Closure Overview, Schedule and Environmental Considerations</u>: To meet the requirements in Section III.G, the Permanent Closure Plan for the Facility will incorporate the following design elements and approximate schedule.
 - 1. Process Water and Leachate management.
 - a. As the annual net evaporation at the Facility is over 37 inches, the proposed water management plan for this Facility relies on evaporating a significant portion of the remaining Phosphogypsum Stack System Wastewater during the initial 13-year period following deactivation.
 - b. On or before Year 12, Simplot will construct a treatment plant that is capable of treating all drainage water seeping from the Phosphogypsum Stack with limestone and lime to reach a pH of 7.0. A lower treatment pH may be considered by EPA if Simplot can demonstrate that treatment objectives (metals removal and neutralization of acidity) can be met. During Year 13 both evaporation and treatment will occur. The treatment plant will treat all Phosphogypsum Stack drainage water in Year 14.
 - 2. Treated water, solids management and closure schedule.

- a. The treated water and associated lime treatment solids will be stored and evaporated in lined ponds that will be constructed on top of the closed Phosphogypsum Stack.
- b. The Phosphogypsum Stack System will be closed in phases as expeditiously as practicable. The following is an approximate plan and schedule for closure that will be the basis for the schedule described in the Phosphogypsum Stack System closure operation plan in Section M. EPA may approve, within its discretion, a request to adjust this schedule if the information provided by Simplot_substantiates its request for a schedule change.

Phase 1 – (Years 1 through 5)

- Close all side slope areas and surface areas of the Phosphogypsum Stack, with the exception of:1) areas that are utilized to store or evaporate excess Process Wastewater; and 2) active portions of the lined return water flow channel to the surge pond and return water pump station.
- Construct benches and install seepage collection drains on the side slopes as necessary to allow for the collection of drainage.
- Install perimeter seepage collection Toe Drains on the north and west sides of the Phosphogypsum Stack and at any other locations as necessary to control water flow.
- For stormwater control, construct lined Surface Water swales and Toe ditches on the north and west sides of the Phosphogypsum Stack.
- Once seepage has subsided, finish grade, amend and cover side slopes of Phosphogypsum Stack with 12-inches of locally available soil and grass/vegetate slopes.
- Grade and construct lined Surface Water detention pond on west side of Phosphogypsum Stack. The detention pond will be provided with a 60mil HDPE bottom Liner and a vegetated, two-foot thick vegetated soil cover. All Surface Water run-off from the closed Phosphogypsum Stack side slopes will be routed through this pond. Surface areas that are no longer needed for treatment and closure operations will be closed and revegetated.

Phase 2 – (Years 6 through 15)

- All top ponds will be used on an as needed basis for Process Wastewater irrigation and evaporation through year 11.
- On or before Year 12, Simplot will begin construction of a double lime treatment plant that will be capable of treating all Phosphogypsum Stack drainage water by Year 14. It is also anticipated that by the end of Year 13 three of the existing top ponds that will ultimately be used for lime sludge storage and evaporation of treated water will be regraded and provided with a 60-mil HDPE bottom Liner.
- Lining of the remaining top ponds will commence after Year 13 and should be complete by the end of Year 15. Final cover will include a 40-mil HDPE Liner covered with a protective, two-foot thick vegetated soil cover. Surface Water control structures will be installed as needed to direct runoff from the closed top ponds to perimeter Surface Water swales or ditches and then to the lined detention pond on the west side of the Phosphogypsum Stack.
- Process water treatment will commence during Year 13.

Phase 3 – (Years 16 through 50)

- After closure of the top ponds, bench and install seepage collection drains on the remaining side slopes of the Phosphogypsum Stack at locations where they do not already exist.
- Install perimeter seepage collection Toe Drains on the east and south sides
 of the Phosphogypsum Stack once the return water flow channel has been
 taken out of service.
- Lined lime sludge storage and evaporation ponds on top of the closed Phosphogypsum Stack will be closed incrementally once seepage rates from the closed Phosphogypsum Stack have reduced sufficiently to warrant closure. Closure of the sludge ponds will include dewatering and drying of the lime sludge materials to a stable consistency that will allow

placement of a one-foot thick, vegetated soil cover. Any exposed HDPE Liner materials on the side slopes of the pond, above the top surface of the lime deposits, will be covered with a protective, two-foot thick vegetated soil cover.

- Commence fifty-year Long-Term Care and maintenance program for the closed Facility once final closure activities are completed and certified.
- 3. Additional environmental requirements.
 - a. Simplot will conduct a monthly measurement to assess whether fluoride atmospheric emissions from the Phosphogypsum Stack during closure are less than or equal to such emissions during plant operation. Simplot will describe in detail the method used to calculate the emissions. If the emissions are greater than the emissions during plant operation, then Simplot will report to EPA the steps necessary to reduce emissions below the target levels.
 - b. Fencing shall be installed, and measures shall be taken to prevent human and wildlife intrusion.
 - c. The areas on top of the Phosphogypsum Stacks that are used for spray irrigation and evaporation and not used for lined sludge/evaporation ponds will be lined with 40-mil HDPE, covered with two (2) feet of soil and planted in native vegetation. Prior to lining these areas, the upper one to two feet of Phosphogypsum will be flushed with treated water. The depth of treated water applied will not be less than four (4) inches over the entire surface to be covered. This flush will reduce the acidity of the upper zone of the Phosphogypsum Stack.
- K. <u>Closure design plan</u>. A closure design plan, which includes water and solids management, shall be prepared to meet the performance standards and requirements specified in Section III.G and III.H, above, and shall be based on the area information report, Groundwater monitoring plan, and assessment of the effectiveness of the existing Phosphogypsum Stack System design and operation. The closure design plan shall consist of engineering plans and a report on closing procedures that shall apply to the closing of the Phosphogypsum Stack System and the monitoring and maintenance during the Long-Term Care period. The closure design plan shall include the following information:

- 1. A plan sheet showing phases of site closing;
- 2. Drawings showing existing topography and proposed final elevations and grades;
- 3. For Phosphogypsum Stack Systems or Components thereof, Final Cover installation plans will show the sequence of applying Final Cover, including thickness and type of material that will be used. All Phosphogypsum Stacks, and Components thereof shall have a Final Cover designed to meet the performance standards set forth below. Final Cover shall be placed over the entire surface of the Phosphogypsum Stack. The Final Cover shall be vegetated (to the extent possible in arid climates) with drought-resistant species to control erosion, whose root systems will not penetrate any required low-permeability barrier layer on the top gradient (or an alternative cover approved in accordance with the Consent Decree or Section K). Water balance calculations, based on available climatic data, shall be prepared that estimate the rates and volumes of water infiltrating the cover systems, collected by any Leachate control system, and migrating out of the bottom of the Phosphogypsum Stack or Liner system. Final Cover may consist of synthetic membranes, soils, or chemically or physically amended soils or Phosphogypsum.
 - a. Top gradients of Final Cover on Phosphogypsum Stacks shall be designed to prevent or minimize ponding or low spots, and minimize erosion and at a minimum meet one of the following design standards specified in (i) (iii), below:
 - i. The Final Cover on the top gradient shall consist of a barrier soil layer at least 18 inches thick, emplaced in six (6)-inch thick lifts. A final, eighteen (18)-inch thick layer of soil or amended Phosphogypsum that will sustain vegetation to control erosion shall be placed on top of the barrier layer. For unlined Phosphogypsum Stacks, the barrier layer shall have a maximum permeability of 1 × 10⁻⁷ cm/sec; for lined Phosphogypsum Stacks, the barrier layer shall have a maximum permeability of 1 × 10⁻⁵ cm/sec. If less permeable soils are used, then the thickness of the barrier layer may be decreased to twelve (12) inches, provided that infiltration is minimized to an equivalent

- degree. A geosynthetic clay Liner system that minimizes infiltration to an equivalent degree may also be used.
- ii. A Geomembrane may be used as an alternative to the lowpermeability soil barrier for a Final Cover, constructed to preclude precipitation infiltration into the Phosphogypsum Stack. A Geomembrane used in Final Cover shall be a semi-crystalline thermoplastic at least forty (40) mils thick, or a non-crystalline thermoplastic at least thirty (30) mils thick, with a maximum water vapor transmission rate of 2.4 grams per square meter per day, have chemical and physical resistance to materials it may come in contact with, and withstand exposure to the natural environmental stresses and forces throughout the installation, seaming process, and settlement of the Phosphogypsum during the closure and Long-Term Care period. A protective soil or amended Phosphogypsum layer at least twenty-four (24) inches thick shall be put on top of the Geomembrane prior to final closure. Material specifications, installation methods, and compaction specifications shall be adequate to protect the barrier layer from root penetration, resist erosion, and remain stable on the final design slopes. This layer shall include soils or amended Phosphogypsum that will sustain vegetative growth.
- iii. In areas where historically evaporation and evapotranspiration exceed precipitation, the Geomembrane option in III.(K)(3)(a)(ii), above, may be used in conjunction with an alternative top cover design in lieu of the twenty-four (24)-inch-thick layer of protective soil or amended Phosphogypsum placed above the Geomembrane. The request for an alternate top cover design must be submitted for approval to EPA.
- b. Side slopes and all other grades shall be designed to minimze erosion of the Final Cover material and infiltration except for the following:
 - i. Top gradient;

- ii. Return Ponds;
- iii. AHP;
- iv. Lime treatment ponds with the definition of the Phosphogypsum Stack System;
- v. Process Wastewater and Leachate channels, cooling channels and ditches; and
- vi. Toe drainage swales.
- c. Such designs shall consider the erosion susceptibility of the material proposed for Final Cover relative to historical precipitation patterns for the area, the ability to establish and maintain vegetation and special maintenance procedures proposed to address infiltration and erosion. In addition, for the side slopes of the Phosphogypsum Stack, the following criteria shall be applicable:
 - i. The side slopes shall be no steeper than two (2)-feet horizontal run to one (1)-foot vertical rise (2H:1V). If the side slopes of any Phosphogypsum Stack are steeper than 2H:1V, then the closure design plan shall include a stability analysis (accounting for seismic considerations) demonstrating the long-term stability of the area.
- d. Cover for the side slope swales, if an aspect of the Phosphogypsum Stack closure design, shall be designed to minimize ponding and low spots, minimize erosion, and infiltration, and at a minimum consist of:
 - i. A barrier layer which may be either a Geomembrane Liner or re-compacted soil;
 - ii. An adequate protective soil layer over the barrier layer (if a Geomembrane) that can sustain vegetation;
 - iii. Unless an alternative cover is approved by EPA, the barrier layer and the protective soil layer for the side slope swales shall conform to the minimum criteria of applicable provisions of Section III, except that the minimum thickness of the Geomembrane, if used in side slope swales, shall be 60-mil (e.g., 60-mil HDPE). The alternative cover, if requested, shall be designed to meet the

performance standards for the Final Cover and provide, at a minimum, the equivalent degree of protection (e.g., minimize infiltration, erosion, etc.) as would be achieved if the Final Cover conformed to the criteria set forth in Section III.

- e. The Final Cover for Components of the Phosphogypsum Stack System shall be designed to:
 - Control, minimize or eliminate the post closure escape of Phosphogypsum and other materials contained within the Phosphogypsum Stack, Process Wastewater, Leachate and contaminated runoff to Surface Water and the ground;
 - ii. Minimize ponding (except in such circumstances where EPA approves use of a Component for Process Wastewater storage);
 - iii. Minimize infiltration; and
 - iv. Minimize erosion and future maintenance.
- f. The closure design plan, depending on the activities under Section III and the performance standards herein, shall provide for the following:
 - May require providing a suitable barrier layer (e.g., Geomembrane, re-compacted soil) and an adequate protective soil layer that can sustain vegetation;
 - ii. Shall, at a minimum, include material specifications (e.g., soil, fill material), vegetation type, installation methods (e.g., grading, excavation), and compaction specifications adequate to meet the performance standards;
 - iii. Shall describe provisions for cover material for Long-Term Care erosion control, filling other depressions, maintaining berms, and general maintenance of the Phosphogypsum Stack System; and

- iv. Shall specify the anticipated source and amount of material necessary for proper closure of the Phosphogypsum Stack System.
- 4. The type of Leachate control system proposed. The Leachate control system shall be designed to prevent releases of Leachate from the Phosphogypsum Stack System.
- 5. Compliance with Groundwater requirements. The closure design plan shall demonstrate how the Phosphogypsum Stack System will meet applicable Groundwater quality standards of the State of Wyoming. The Groundwater monitoring and sampling schedule may be adjusted for a Phosphogypsum Stack System where Groundwater contamination is not evident or corrective measures have been taken to correct contamination.
- 6. The proposed method of stormwater control. This shall include control of stormwater on the Phosphogypsum Stack System. Stormwater or other Surface Water that mixes with Leachate shall be considered Leachate and if discharged, shall be treated to meet the permit or regulatory requirements of the State of Wyoming. The stormwater control plan shall meet the requirements of the State of Wyoming.
- 7. The proposed method of access control. The closure design plan shall describe how access to the closed Phosphogypsum Stack System shall be restricted to prevent any future waste dumping or use of the Phosphogypsum Stack System by unauthorized persons. Restricted access shall remain in force until the Phosphogypsum Stack System is stabilized and there is no evidence that the property is being used as an unauthorized dump site.
- 8. A description of any proposed final use of the Phosphogypsum Stack and Phosphogypsum Stack System or Component thereof.
- L. <u>Closure construction quality assurance plan</u>. A detailed construction quality assurance plan shall be developed for construction activities associated with the closure of the Phosphogypsum Stack System, including each Component of the Final Cover system. The plan shall specify quality assurance test procedures and sampling frequencies. Records shall be kept to document construction quality and demonstrate compliance with plans and specifications. Upon completion of

closure activities, a final construction quality assurance report shall be submitted to EPA, prepared by an engineer. The final report shall include at least the following information:

- 1. Listing of personnel involved in closure construction and quality assurance activities;
- 2. Scope of work;
- 3. Outline of construction activities;
- 4. Quality assurance methods and procedures;
- 5. Test results (destructive and non-destructive, including laboratory results); and
- 6. Record drawings.
- M. <u>Phosphogypsum Stack System Closure Operation Plan</u>. This plan, as part of the Permanent Phosphogypsum Stack System Closure Plan, shall be designed to protect human health and the environment by:
 - 1. Describing the actions that shall be taken to close the Phosphogypsum Stack System, such as placement of cover, grading, construction of berms, ditches, roads, retention-detention ponds, installation or closure of wells and boreholes, installation of fencing or seeding of vegetation, protection of on-site utilities and easements;
 - 2. Providing a time schedule for completion of closure and Long-Term Care;
 - 3. Containing appropriate references to the closure design plan, area information report, Groundwater monitoring plan, and other supporting documents:
 - 4. Providing an updated Cost Estimate in accordance with Appendix 2 (Financial Assurance);
 - 5. Indicating any additional equipment and personnel needed to complete Stack Closure of the Phosphogypsum Stack System; and
 - 6. Describing any proposed use of the system for water storage or water management.
- N. <u>Certification by an Engineer</u>. Information, plans, and drawings presented in support of a closure plan shall be prepared under the direction of, and certified by, an engineer. A letter of appointment shall be submitted by the proper company official confirming that the engineer is authorized to prepare plans and specifications. The engineer shall be required to make periodic inspections during the closing of Phosphogypsum Stack System to ensure closure is being

- accomplished according to the Permanent Phosphogypsum Stack System Closure Plan.
- O. Nothing in this Section is intended to preclude the construction of a lined Return Pond or AHP, sludge storage pond or Evaporation Pond on top of an Inactive or closed Phosphogypsum Stack, as long as the pond is constructed in accordance with the applicable provisions of Appendix 1.B (Phosphogypsum Stack System Construction and Operational Requirements), and as long as the design is included in the closure plan. Within such a Return Pond, AHP, solids or Evaporation Pond, while in use, the requirements for minimizing ponding and establishing vegetation cover are not applicable.

IV. Temporary Deactivation of Phosphogypsum Stack Systems and Components of Phosphogypsum Stack Systems

- A. Simplot may request, in writing, a determination by EPA that the provisions of Section III may be deferred in limited circumstances when a Phosphogypsum Stack, Phosphogypsum Stack System or Component thereof will temporarily cease to receive Phosphogypsum or Process Wastewater but Simplot intends for the Phosphogypsum Stack System or Component thereof to become Active in the future. In such circumstances, Simplot shall request approval of a Temporary Deactivation of the Phosphogypsum Stack, Phosphogypsum Stack System or Component thereof. This request must be submitted on a yearly basis until the Phosphogypsum Stack, Phosphogypsum Stack System or Component thereof becomes Active. EPA may authorize a Temporary Deactivation approval for each individual Phosphogypsum Stack, Phosphogypsum Stack System or Component thereof in accordance with this subsection or deny the request for such an approval.
- B. Each request shall set forth at least the following information:
 - 1. The specific Phosphogypsum Stack, Phosphogypsum Stack System or Component thereof for which approval of a Temporary Deactivation is sought;
 - 2. A demonstration that current economic or other conditions justify a Temporary Deactivation of the Phosphogypsum Stack or Phosphogypsum Stack System or Component thereof;

- 3. An estimate of the duration of the Temporary Deactivation of Phosphogypsum Stack System and a demonstration that the Phosphogypsum Stack System or Component thereof is reasonably expected to become Active within this estimated time period; and
- 4. The most recent ISSMP.
- C. If EPA determines that other information is necessary to ascertain if a Temporary Deactivation is warranted, then the applicant must submit the additional information upon request.
- D. Upon approval of the Temporary Deactivation by EPA, Simplot must implement the procedures set forth in the approved ISSMP immediately upon the Phosphogypsum Stack System deactivation. The applicant shall also provide any additional such information requested by EPA.
- E. If, after review of the information submitted pursuant to (B) and (C) above, EPA determines that Temporary Deactivation has not been justified by Simplot, then Simplot may continue to operate the Phosphogypsum Stack, Phosphogypsum Stack System or Component thereof or permanently close the Phosphogypsum Stack, Phosphogypsum Stack System or Component thereof in accordance with the provisions of Section III.
- F. If, at any time during the approved Temporary Deactivation period, EPA requires information to ascertain if the criteria under (B)(1)-(3) of this Section are being met, then Simplot will provide such information within thirty (30) days of the request by EPA.
- G. If, after review of the information submitted pursuant to (F) above or otherwise, EPA determines that Simplot has not demonstrated that it satisfies the criteria specified in (B)(1)-(4), then EPA will so notify Simplot of its determination and the provisions of Section III will apply.

V. Stack Closure Procedures

A. <u>Stack Closure inspections</u>. The Permanent Closure Plan must specify which particular closing steps or operations must be inspected and approved by EPA before proceeding with subsequent closure actions.

- B. <u>Final survey and record drawings</u>. A final survey shall be performed, after permanent closure is complete, by an engineer or a registered third-party land surveyor to verify that final contours and elevations of the Phosphogypsum Stack System or Component thereof that is the subject to the Permanent Closure Plan are in accordance with the plan as approved by EPA. Aerial mapping techniques that provide equivalent survey accuracy may be substituted for the survey.
 - 1. The survey or aerial mapping information shall be included in a report along with information reflecting the record drawings of the Phosphogypsum Stack System or Component thereof. Contours should be shown at no greater than five (5)-foot intervals.
 - 2. Simplot shall submit this report to EPA in accordance with the closing schedule.
- C. <u>Certification of closure construction completion</u>. A certification of closure construction completion, signed, dated and sealed by a Third-Party Engineer shall be provided to EPA and Wyoming DEQ upon completion of closure.
- D. Official date of Stack Closure. Upon receipt of the documents required in (B) and (C) of this Section, EPA shall acknowledge by letter to Simplot that notice of termination of operations and Stack Closure has been received. The date of this letter shall be the official date of closure for purposes of determining the beginning of the Long-Term Care period.
- E. <u>Use of closed Phosphogypsum Stack Systems</u>. Closed Phosphogypsum Stack Systems or Components thereof, if disturbed, are a potential hazard to public health, Groundwater and the environment. Consultation with and approval by EPA is required before conducting activities that may disturb the closed Phosphogypsum Stack Systems or Components thereof, except for routine maintenance activities.

VI. Long-Term Care for Phosphogypsum Stacks/ Phosphogypsum Stack Systems/Components

A. <u>Long-Term Care period</u>. Simplot shall be responsible for monitoring and maintenance of the Facility, including the applicable requirements of Section III, in accordance with an approved Permanent Phosphogypsum Stack System Closure Plan for fifty (50) years from the date of closure as specified Section V.D

- above unless a reduced Long-Term Care period is approved by EPA in accordance with (C), below.
- B. Before the expiration of the Long-Term Care monitoring and maintenance period, EPA may extend the time period if it is determined that:
 - 1. The closure design or closure operation plan under the Permanent System Closure Plan was ineffective in meeting the standards herein; or
 - 2. The extension of the Long-Term Care period is necessary to protect human health and the environment.
- C. Reduced Long-Term Care period. Simplot may request, in writing, a reduced Long-Term Care schedule. EPA may approve, within its discretion, the request if the information provided by Simplot substantiates its claim that the reduced period is sufficient to protect human health and the environment. The request must, at a minimum, demonstrate that the Phosphogypsum Stack System or a Component thereof addresses the criteria of (1)-(4), below and provide any other information relevant to establishing that the reduced period is sufficient to protect human health and the environment:
 - 1. The Phosphogypsum Stack System has been constructed and operated in accordance with approved standards, and has a Leachate control system and/or a Liner that has controlled, minimized or eliminated releases;
 - 2. The Phosphogypsum Stack System has been closed with appropriate Final Cover, that the vegetative cover (or alternative approved in accordance with this Section) has been established, and a monitoring system has been installed and is operating as intended;
 - 3. The Phosphogypsum Stack System has a twenty (20)-year history after the date of closure of no unresolved violations of water quality standards or criteria detected in the monitoring system, and no increases over Background water for any monitoring parameters that may be expected to result in violations of water quality standards or criteria; and
 - 4. The Phosphogypsum Stack System has had no detrimental erosion of the cover system.

- D. Replacement of monitoring devices. If a monitoring well or other device required by the monitoring plan is destroyed or fails to operate for any reason, Simplot shall, as soon as possible but no later than seven (7) days after discovery, notify EPA in writing. All inoperative monitoring devices shall be replaced with functioning devices within sixty (60) days or as soon as is practicable to accommodate weather and equipment availability, of the discovery of the malfunctioning devices unless Simplot is notified otherwise in writing by EPA.
- E. <u>Certification of Long-Term Care Completion</u>. A certification of Long-Term Care completion signed, dated and sealed by a Third-Party Engineer, shall be provided by Simplot to EPA upon completion of Long-Term Care.

VII. Closure of Unlined Systems in Phosphogypsum Stacks/ Phosphogypsum Stack Systems

A. No Phosphogypsum or Process Wastewater shall be placed in an unlined Phosphogypsum Stack System after five (5) years of the Effective Date. For purposes of this Section VII, "unlined" means that the Phosphogypsum Stack System was constructed without an installed Liner meeting those standards outlined in Appendix 1.B, Section VI (Construction Requirements for New Phosphogypsum Stacks, Lateral Expansions of Existing Phosphogypsum Stack Systems or Components), except a Liner system or an alternative Liner previously approved by EPA and memorialized in Paragraph 25 of the Consent Decree and Appendix 7 (Alternative Liner Requirements).

Simplot Rock Springs Consent Decree Appendix 1.D

APPENDIX 1.D - CRITICAL CONDITIONS AND TEMPORARY MEASURES

I. Requirements for Perimeter Dikes

- (1) If a critical condition is confirmed, then EPA shall be notified immediately and the defective area of any Perimeter Dike shall be inspected daily in accordance with Section VIII of Appendix 1.B, until corrective maintenance has cured such defect. A written report of the condition and the actions taken or to be taken for its correction shall be made to the EPA within seven (7) days from the time existence of the critical condition is confirmed.
- (2) Any of the following items shall be considered as indicating a critical condition that requires immediate investigation and may require emergency maintenance action:
 - (a) Concentrated seepage on the downstream slope, at the slope Toe, or downstream from the slope Toe (e.g., a gypsum boil, soil cone, spring, or delta);
 - (b) Evidence of slope instability including sloughing, bulging or heaving of the downstream slope, or subsidence of any Perimeter Dike slope or crest;
 - (c) Structurally significant cracking of surface on crest or either face of the Perimeter Dike slope;
 - (d) General or concentrated seepage in the vicinity of or around any conduit through the Perimeter Dike; or
 - (e) Observed or suspected damage to the Liner system where there is a release or the potential for a release from the Liner system.

II. Temporary Measures for Use of Design Freeboard to Prevent Release

- (1) Temporary Use of the Freeboard
 - (a) Temporary use of the Freeboard of a Perimeter Dike or a Gypsum Dike is authorized when the water level is at the design Freeboard and when such use is necessary to prevent the release of untreated Process Wastewater. Such use of the Freeboard shall only be allowed when a Third-Party Engineer has approved such use; and
 - (b) When documentation demonstrating the continued safety and stability of the Dike is submitted to EPA. Such documentation shall include a listing of any operational limitations or constraints recommended by the Third-Party Engineer as set forth in this Section together with confirmation that

Simplot will comply with such recommendations. The Third-Party Engineer shall base recommendations on:

- (i) An inspection of the Phosphogypsum Stack System;
- (ii) Dike design and construction information;
- (iii) Results of seepage and stability analyses (including monitoring of seepage pressures within the Dike if such monitoring is deemed necessary); and
- (iv) Wind Surge and Wave Height and Run-up analyses.
- (c) The report by the Third-Party Engineer shall specify conditions under which such use may be undertaken so as not to jeopardize the integrity of the Dike, such as:
 - (i) Acceptable wind speeds in forecast;
 - (ii) Increased inspection frequencies; and
 - (iii) Weekly monitoring of piezometric levels within the mass of the Dike, if and as needed.
- (d) The Third-Party Engineer shall evaluate the Phosphogypsum Stack System each time use of the design Freeboard is proposed by Simplot. The EPA shall be informed of the proposed use and the engineer's recommendations prior to or within 24 hours of each such occurrence.
- (2) If the Perimeter Dike of the Phosphogypsum Stack System is an above-grade Dike, then the Phosphogypsum Stack System may incorporate an emergency spillway to allow for the controlled release of Process Wastewater during emergencies and to avoid overtopping of the Perimeter Dike. The spillway shall be located so as to minimize the environmental impact of any release to the extent practicable. This provision shall not be deemed to authorize a discharge from the spillway and shall not be construed to limit EPA's exercise of enforcement discretion in the event that such discharge causes or contributes to a violation of applicable federal and/or state regulations.

III. Requirements for Actively Operated Phosphogypsum Stack Systems

(1) When a critical condition is suspected during any inspection, the inspector shall ensure that a competent technical representative of Simplot is made aware of the condition immediately. If the existence of the critical condition is confirmed, then EPA shall be notified immediately. A written report of the condition and the

- actions proposed for its correction shall be made to EPA within seven (7) days from the time existence of the critical condition is confirmed.
- (2) Any of the following items shall be considered as indicating a critical condition that requires immediate investigation and may require emergency maintenance action:
 - (a) Concentrated seepage (e.g., springs or boils) on the face of a Phosphogypsum Stack slope, at the slope Toe, or beyond the slope Toe with active signs of Piping at the point of seepage (e.g., a gypsum or soil cone or delta at the point of seepage);
 - (b) Evidence of slope instability including sloughing, bulging or heaving of the face of the Phosphogypsum Stack or the slope Toe;
 - (c) Continued and increasing lateral movement or subsidence of the slope or crest of the Phosphogypsum Stack;
 - (d) Formation of new non-shrinkage cracks or enlargement of wide cracks in the surface of the slope or crest of the Phosphogypsum Stack, excluding locations of newly constructed features that have not dried and/or received final grading and compaction;
 - (e) Observed or suspected damage to the Liner system where there is a release or the potential for a release from the Liner system;
 - (f) Drains discharging turbid water;
 - (g) Concentrated seepage (i.e., springs or boils) in the vicinity of a decant pipe.

IV. Emergency Diversion Impoundment (EDI)

- (1) Simplot may temporarily use an approved EDI in accordance with applicable state authorization to receive and store discharges of process water from the Phosphogypsum Stack System to avoid safety-related problems and/or to avoid or reduce the unpermitted discharge of process water from the Phosphogypsum Stack System to Surface Waters of the State.
- (2) Simplot shall provide to EPA a list of previously designated EDIs (as reflected in applicable permits or water management plans) prior to the Effective Date of the Consent Decree. Any additional EDIs that Simplot wishes to designate after the Effective Date of the Consent Decree must be authorized by the State of Wyoming prior to use.

- (3) Simplot shall transport process water to/from the EDI through an emergency spillway or by pumping where necessary.
- (4) Following any emergency discharge into an EDI, and within 60 days after such discharge is initiated, Simplot shall submit a detailed remedial plan to EPA for approval. After submission of the plan, Simplot will initiate all steps necessary in accordance with the plan to remove the discharge from the EDI and remediate the area, if necessary, to return that impoundment to its prior use.

Simplot Rock Springs Consent Decree Appendix 1.E

Appendix 1.E - Phosphogypsum Stack System Permanent Closure Application

PART I – INSTRUCTIONS

Email:

Phosphogypsum Stack Systems must be closed pursuant to the Consent Decree entered in the United States of America v(Court Name, Civil Action Number:), Appendix 1.B and 1.C and in accordance with conditions set forth in the Consent Decree. The applicant shall complete Part II and submit this form, certifie the applicant and its Third-Party Engineer. This form should be typed or printed. It additional space is needed, separate, properly identified sheets of paper may be attached. All blanks shall be filled or modified N/A (not applicable).	d by
In addition to the information listed on this form and otherwise required by the Consecree, including Appendix 1.B and 1.C, the applicant shall submit all information necessary to evaluate the proposed closure plan to ensure the Phosphogypsum Statem will pose no significant threat to public health or the environment. A minim four copies of this application (preferably in a large binder) shall be submitted to the EPA. Please complete applicable Sections of the application.	tack um of
PART II - GENERAL INFORMATION	
Application for permanent closure: Phosphogypsum Stack Collection ponds or surge ponds Ot	ther
(2) Facility name:	
(3) Facility RCRA EPA ID No.:	
(4) Facility location (main entrance):	
(5) Location: Latitude Longitude	
Section_TownshipRangeUTMs: Zonekm E_km N	
(6) Applicant Name (Operating Authority):	
Street Address & P. O. Box:	
City: County: Zip:	
Contact Person-Name Phone:	

7) Authorized Agent/Consultant Name:				
S	Street Address & P. O. Box:			
		County:		
C	Contact Person-Name		Phone:	
Е	Email:			
	and Owner if different from applicant):			
	Address of Landowner: Street & P. O. Box:			
C	City:	County:	Zip:	

PART III - CLOSURE GENERAL REQUIREMENTS

APPLICATIONS AND SUPPORTING INFORMATION SHALL INCLUDE THE FOLLOWING:

- (1) Four copies of the completed application form, all supporting data, and reports;
- (2) A letter of transmittal to the EPA;
- (3) A table of contents listing the main section of the application;
- (4) Third-Party Engineer certification;
- (5) Third-Party Engineer's letter of appointment if applicable;
- (6) Closure Plan, Consent Decree Appendix 1.C;
- (7) Copy of any lease agreement, transfer of property agreement with right-of-entry for Long-Term Care, or any other agreement between operator and property owner by which the closure and Long-Term Care of the Facility may be affected.

PART IV - CLOSURE PLAN REQUIREMENTS

The following information items must be included in the application or an explanation given if they are not applicable. These are general references. Please see Appendix 1.C for the complete requirements of each section.

(1) General Information Report:

- (a) Identification of the Phosphogypsum Stack System
- (b) Name, address, and phone number of primary contact person
- (c) Name of person(s) or consultants preparing closure plan
- (d) Present property owner(s) and operator
- (e) Locations of main entrance or operator's office of the Phosphogypsum Stack System by: township, range, section and latitude and longitude
- (f) Total acreage of Phosphogypsum Stack System and total acreage of Facility property
- (g) Legal description of property on which the Phosphogypsum Stack system is located
- (h) History of Phosphogypsum Stack System construction and operations

(2) Area Information Report:

(a) Topography

	Completeness Check	Binder Location
(1) General Information Report		
(a) Identification of the Phosphogypsum Stack System		
(b) Name, address, and phone number of primary contact person		
(c) Name of person(s) or consultants preparing closure plan		
(d) Present property owner(s) and operator		
(e) Locations of main entrance or operators office of the Phosphogypsum Stack System by: township, range, section and latitude and longitude		
(f) Total acreage of Phosphogypsum Stack System and total acreage of Facility property		

	Completeness Check	Binder Location
(g) Legal description of property on which the Phosphogypsum Stack system is located		
(h) History of Phosphogypsum Stack System construction and operations		
(2) Area Information Report		
(a) Topography		
(b) Hydrology		
(c) Geology		
(d) Hydrogeology		
(e) Ground and Surface Water quality		
(f) Land use information		
(3) Groundwater monitoring plan containing site specific information (Appendix 1.A)		
(4) Assessment of the effectiveness of existing Phosphogypsum Stack System design and operation		
(a) Effectiveness and results of Groundwater investigation		
(b) Effects of Surface Water runoff, drainage pattern and existing storm water control		

	Completeness Check	Binder Location
(5) Performance Standards		
(a) Approach used for:		
Controlling, minimizing or eliminating the post closure escape of Phosphogypsum, Process Wastewater, Leachate, and contaminated runoff to Groundwater and Surface Waters		
2. Minimizing Leachate generation		
3. Detecting, collecting, and removing Leachate and Process Wastewater efficiently from the Phosphogypsum Stack System and promoting drainage of Process Wastewater from the Phosphogypsum Stack		
Minimizing the need for further maintenance		
(b) Discussion of approach used to ensure that the Final Cover system is designed to protect human health and the environment:		
Promoting drainage off the Phosphogypsum Stack		
2. Minimizing ponding		
3. Minimizing erosion		
Minimizing infiltration into the Phosphogypsum Stack		
5. Functioning with little or no maintenance		
(c) Closure of ponds and drainage conveyances storing Process Wastewater		

		Completeness Check	Binder Location
(6)	Closure design plan		
	(a) Phasing of site closure		
	(b) Existing topography and proposed final grades		
	(c) Final Cover installation plans		
	(d) Type of Leachate control system proposed		
	(e) Compliance with Groundwater protection requirements of the Wyoming DEQ		
	(f) Proposed method of stormwater control		
	(g) Proposed method of access control		
	(h) Proposed final use of Phosphogypsum Stack System property		
(7)	Closure construction quality assurance plan		
	(a) Listing of personnel involved in closure construction and quality assurance activities		
	(b) Scope of work		
	(c) Outline of construction activities		
	(d) Quality assurance methods and procedures		
	(e) Test results		
	(f) Record drawings		

	Completeness Check	Binder Location
(8) Closure Operation Plan		
(a) Describe actions which will be taken to close the Phosphogypsum Stack System		
(b) Time schedule for completion of closure and long term care		
(c) Equipment and personnel needs to complete closure		
(d) Appropriate references to design closure plan		
(e) Proposed use of the system for water storage or water management		
PART V - CERTIFICATION BY APPLICANT AND THIRD-PARTY ENGINEER (1) Applicant The undersigned applicant or authorized representative¹ of is aware that statements made in this form and the attached information are an application for closure approval from the EPA and certifies that the information in application is true, correct and complete to the best of his knowledge and belief. Signature of Applicant or Authorized Representative		
Date By Name		
 Professional Engineer registered in required in [State code]. 		
This is to certify that the engineering feature Phosphogypsum Stack System Closure Pla		

¹ Attach letter of authorization if representative is not the owner or a corporate officer.

and found to conform to engineering principles applicable to such facilities. In my professional judgment, this Facility's Permanent Phosphogypsum Stack System Closure Plan, when properly executed, will comply with the requirements of Appendix 1.B and 1.C of the Consent Decree (Civil Action No:). It is agreed that the undersigned will provide the applicant with a set of instructions of proper maintenance and closure of the Facility.			
Data	By		
Date	Name Title		
Mailing Address			
City:	County:	_ Zip:	
Telephone Number (including area code):			
State Registration Number:			
(Please affix seal)			