

UNITED STATES DISTRICT COURT  
DISTRICT OF IDAHO

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UNITED STATES OF AMERICA,	)	
	)	Civil No. 1:23-cv-322
Plaintiff,	)	
	)	
v.	)	CONSENT DECREE
	)	
J.R. SIMPLOT COMPANY,	)	
	)	
Defendant.	)	

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**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 Defendant J.R. Simplot Company (“Simplot” or “Defendant”) has violated the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. §§ 6901-6992k, and implementing federal and state regulations; the Clean Air Act (“CAA”), 42 U.S.C. §§ 7401-7671q, and implementing federal and state regulations; the Comprehensive Environmental Response Compensation and Liability Act (“CERCLA”), 42 U.S.C. §§ 9601-9675, and implementing federal regulations; and, the Emergency Planning and Community Right-to-Know Act (“EPCRA”), 42 U.S.C. §§ 11001-11050, and implementing federal regulations, at Simplot’s Don Plant, a phosphoric acid and fertilizer manufacturing plant located near Pocatello, Idaho (“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 the Facility, without a RCRA permit or interim status, including: the production of granulated fertilizers; wastes generated during cleaning of phosphoric acid, super phosphoric acid (“SPA”), purified phosphoric acid (“PPA”), and fertilizer plant equipment; wastewaters generated from the manufacture of phosphoric acid, SPA, PPA, and from scrubbers used to control air pollution from the phosphoric acid plant; and other chemical and waste management processes at its Facility. 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 Idaho Administrative Procedures Act, IDAPA 58.01.05, and that those hazardous wastes remain at the Facility;

**WHEREAS**, the Complaint includes allegations, disputed by Simplot, that Simplot has operated its cooling towers with fluoride emissions exceeding the federally-enforceable emission limit in the Idaho Department of Environmental Quality (“Idaho DEQ”) Permit to Construct for the Facility, in violation of section 113 of the CAA, 42 U.S.C. § 7413; has introduced to its cooling towers liquid effluent from absorbers (also referred to as wet scrubbing devices) installed to control emissions from process equipment in violation of section 112 of the CAA, 42 U.S.C. § 7412 and regulations issued thereunder and in violation of Simplot’s Tier I/Title V Permit issued by Idaho DEQ, in violation of Title V of the CAA, 42 U.S.C. §§ 7661a-7661e;

**WHEREAS**, the Complaint includes allegations, disputed by Simplot, that Simplot failed to notify the National Response Center, state, and local agencies of releases of a hazardous substance from the Facility, hydrogen fluoride (HF), in violation of CERCLA section 103, 42 U.S.C. § 9603, and EPCRA section 304, 42 U.S.C. § 9654, and their implementing regulations at 40 C.F.R. § 302.6, 40 C.F.R. § 355, Subpart C. The Complaint also alleges, and Simplot disputes, 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 2012, 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 2013 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 CAA violations and the alleged CERCLA and 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 RCRA, in particular under the Bevill Exclusion, and with the CAA, CERCLA, and EPCRA, and is not liable for civil penalties or injunctive relief as alleged in the Complaint;

**WHEREAS**, the location of the Facility and the history of federal and state actions to address environmental matters associated with the Facility's past operations, described in the clauses below, is relevant to the scope of relief the Parties agree is necessary and appropriate under this Consent Decree;

**WHEREAS**, the Facility is located near the boundary of but not located within the Fort Hall Reservation of the Shoshone-Bannock Tribes ("Tribes"). The Facility is also adjacent to the Portneuf River, a tributary of the Snake River that flows generally northward through approximately 1.5 miles of the Eastern Michaud Flats Superfund Site ("EMF Site") within which

the Facility is located, and enters the Fort Hall Reservation approximately 2 miles downstream of the Facility. Within the Fort Hall Reservation, the Portneuf River reaches an area, known as “the Bottoms Area,” that is used by tribal members for hunting, fishing, and gathering, and is of cultural significance to the Tribes. North of Interstate 86, between the EMF Site and the Fort Hall Reservation, the Portneuf River transitions from a “losing stream” to a “gaining stream” where large influxes of groundwater enter the river directly from springs and upwelling. Groundwater affected by the EMF Site enters the river along this stretch;

**WHEREAS**, the Facility is within and has been delineated by EPA to be an “Operable Unit” of the EMF Site that EPA placed on the National Priorities List (NPL), set forth at 40 C.F.R. Part 300, Appendix B, on August 30, 1990. In a January 20, 2010 Interim Amendment to the June 8, 1998 CERCLA Record of Decision (ROD), EPA identified contamination from management of wastes in the previously unlined Phosphogypsum Stack System and other activities at the Facility as contributing to water quality and habitat degradation and posing a substantial risk to ecological receptors. EPA specified the remedial actions to be performed under CERCLA to address the Facility’s impact on groundwater and on the Portneuf River, including the lining of the receiving surface of the Phosphogypsum Stack System to reduce and prevent seepage and loading of phosphorous and the associated release of hazardous contaminants at and from the Facility, as well as remediation of soil and groundwater contamination;

**WHEREAS**, Simplot agreed to perform the designated remedial actions for the Facility’s Operable Unit as prescribed under a Consent Decree in *United States v. FMC Corp. and J.R. Simplot Co.*, Civ. No. 99-296-E-BLW (D. Idaho), entered on May 9, 2002 (“2002 RD/RA CD”), and under a First Amendment to that Consent Decree entered on November 16, 2010 (“2010

RD/RA CD Amendment”). Simplot placed and operates numerous monitoring and extraction wells throughout the Facility as part of those remedial activities, and implemented 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 substances at or from the Facility;

**WHEREAS**, Simplot entered into a 2008 voluntary consent order with Idaho DEQ (“2008 VCO”) to address phosphorus in the Portneuf River under the approved Total Maximum Daily Load through source control and groundwater extraction/reuse or treatment. Under the 2008 VCO, Simplot agreed to provisions in a remedial action plan that required the lining of the existing Phosphogypsum Stack along with other source control measures. The 2008 VCO also requires the lining of any Phosphogypsum Stack serving the Facility on land Simplot subsequently acquired, along with a siting evaluation report, a background water quality investigation, a groundwater monitoring program, and a corrective action plan in the event of a liner failure. The 2008 VCO also specified that design and supporting documentation, operation and maintenance procedures, final reclamation plans and closure plans for any new or expanded Phosphogypsum Stack required approval by the Idaho DEQ prior to the start of construction. These provisions of the 2008 VCO were similarly reflected in the subsequent 2010 RD/RA CD Amendment that included requirements for Simplot to provide EPA, for any new or expanded Phosphogypsum Stack design, with a siting evaluation report, a background water quality investigation, a groundwater monitoring program, a corrective action plan in the event of a liner failure, and a proposed construction schedule;

**WHEREAS**, on May 17, 2010, Simplot received approval from Idaho DEQ to install a synthetic intermediate liner on the existing Phosphogypsum Stack at the Facility. Pursuant to this approval, the placement of liner on the last portion of the receiving surface of the existing Phosphogypsum Stack at the Facility was completed on November 9, 2017. On September 28, 2018, EPA sent a letter to Simplot confirming that this milestone had been completed pursuant to the 2010 RD/RA CD Amendment. In 2020 and 2021, the State of Idaho passed laws establishing design and construction standards for a new or expanded Phosphogypsum Stack(s) built within the state that now mandate the use of a liner (Idaho Code §§ 39-176A – 39-176F);

**WHEREAS**, EPA designated an “Off-Plant Operable Unit” of the EMF Site that was separate both from the Operable Unit comprising the Facility and from another (now-closed) manufacturing plant that the FMC Corporation (“FMC”) formerly operated adjacent to the Facility. EPA’s selected remedial action for the Off-Plant Operable Unit included additional monitoring and risk assessments for contaminants of concern such as fluoride, metals, and radionuclides. This action was based on EPA’s conclusion that particulates associated with air emissions from operations at the Facility (and from another manufacturing plant, now closed, that formerly was operated by FMC) have settled on nearby surface soils and vegetation. For fluoride, the remedy consisted of the monitoring of fluoride near the Facility and the former FMC plant, evaluation of the monitoring data and, if monitoring indicated unacceptable risks, identification of appropriate source control or other actions. In implementing this remedy, EPA consulted with Simplot, FMC, and the Tribes to identify data gaps; created reports summarizing prior work; conducted new soil and vegetation sampling; evaluated data trends; and updated its prior ecological risk assessment based on updated EPA methodologies and new data -- including data from the sampling of fluoride in forage and soils in the Bottoms Area of the Reservation, a



review of potential impacts to bison, honey bees and other potential ecological receptors, and reassessment of EPA's prior analysis of potential human health risks from fluoride. EPA concluded in June 2020 that the fluoride monitoring remedy for the Off-Plant OU was complete and that no additional source control actions to reduce fluoride emissions from the Facility were required or warranted under CERCLA but, if needed, could be adequately addressed under state and federal air programs. In reaching this determination, EPA concluded that: (1) the fluoride monitoring remedy had provided a comprehensive characterization of potential ecological risks from exposure to fluoride in soils and vegetation in the Off-Plant Operable Unit; (2) fluoride concentrations resulting from air emissions from the Facility potentially impact ecological receptors at the individual level but that widespread or significant ecological impacts at the community or population level are not expected; (3) fluoride levels do not present human health risks above CERCLA risk thresholds; and (4) state and federal air programs provide authority for further action if needed to control fluoride impacts;

**WHEREAS**, Simplot entered into a consent order with Idaho DEQ on June 26, 2016, Case No. E-2012.0022 ("2016 Consent Order"), under which, *inter alia*, under paragraph 10.A, Simplot agreed to either decommission the Reclaim Cooling Towers at the Facility and replace them within ten years with a low emission alternative, or implement other measures that would reduce fluoride emissions from the Reclaim Cooling Towers by at least fifty percent (50%);

**WHEREAS**, Simplot has intervened as a party in *Shoshone-Bannock Tribes of the Fort Hall Reservation v. Laura Daniel-Davis, et al.*, No.: 20-cv-00553-BLW (D. Idaho) ("Land Exchange Litigation"), which involves property Simplot acquired on December 15, 2020 pursuant to a land exchange with the U.S. Department of the Interior, Bureau of Land Management. On March 31, 2023, the district court granted in part and denied in part cross

motions for summary judgment regarding the legality of the subject land exchange, and directed the parties to propose a briefing schedule on the issue of remedy. On April 10, 2023, Simplot notified Idaho DEQ that the district court's March 31, 2023 order in the Land Exchange Litigation may impact Simplot's ability to meet the requirements of paragraph 10.A of the 2016 Consent Order, subject to further briefing and orders in that case. On April 28, 2023, the district court established a briefing schedule in the Land Exchange Litigation to consider anticipated interlocutory appeal motions before considering subsequently any injunction, remedies, or other relief sought by the Tribes;

**WHEREAS**, the objective of the Parties to this Consent Decree is to resolve the civil claims alleged in the Complaint by prescribing certain agreed-upon 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 make other changes in operations to reduce fluoride emissions; by ensuring submission of complete reports of hazardous substances and toxic chemicals released to the environment or disposed of from Facility operations; 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 or is required to implement certain operational changes and corrective measures at and with respect to the Facility, pursuant to the federal and state orders described above and otherwise, thus obviating the need for 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 and dispute

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); section 304(b)(1)(B) of the CAA, 42 U.S.C. § 7604(b)(1)(B); section 310(d)(2) of CERCLA, 42 U.S.C. § 9659(d)(2); 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 113 of the CAA, 42 U.S.C. § 7413; section 109 of CERCLA, 42 U.S.C. § 9609; 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); section 113(b) of the CAA, 42 U.S.C. § 7413(b); section 109(c)(1) of CERCLA, 42 U.S.C.

§ 9609(c)(1); 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), and section 113(a) and (b) of the CAA, 42 U.S.C. § 7413(a),(b), notice of the commencement of this action has been given to Idaho 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; section 112(d), 113(b), and 502(a) of the CAA, 42 U.S.C. §§ 7412(d), 7413(b), and 7661a(a); section 103 of CERCLA, 42 U.S.C. § 9603; 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 XVIII (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 XV (Notices) and as may otherwise be agreed in writing) transferring obligations to the transferee, to EPA and DOJ, in accordance with Section XV (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 XI (Dispute Resolution), but any judicial review shall be conducted pursuant to Paragraph 83(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, CERCLA, CAA, and EPCRA. 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 1-9 and 11 to this Consent Decree are set forth within those Appendices or in Appendix 10:

(a) “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);

(b) “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);

(c) “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;

(d) “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);

(e) “Animal Feed” shall mean non-ammoniated mono-calcium and di-calcium phosphate produced by the reaction of phosphoric acid, limestone, and diatomaceous earth;

(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 XXV (Appendices) and attached hereto;

(i) “Corrective Action” shall mean the activities required pursuant to RCRA (separate and apart from activities that EPA retains the authority to require under CERCLA), or required under analogous state and local authorities, to investigate, remediate or otherwise address the presence or release of solid or hazardous wastes at or from the Facility, including any release of Phosphogypsum Stack System Wastewater;

(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;

(l) “Downstream Operations” shall mean all Facility operations involving the storage, management, transport, treatment, disposal, or further processing of the First Saleable Product, and manufacturing operations that use the First Saleable Product as a feedstock, except for units designated as a Mixed-Use Unit, Acid Value Recovery Units, Grandfathered 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 XVI (Effective Date);

(o) “Facility” shall mean Simplot’s Don Plant, including manufacturing plants, Phosphogypsum Stack Systems, and such other contiguous or adjacent property owned and/or operated by Simplot, at the following location: approximately 1.5 miles northwest of Pocatello, Idaho, as delineated in Appendix 3 (Site Maps);

(p) “Facility Report” shall mean the report dated November 11, 2022, and attached hereto as Appendix 4, prepared by the Parties and reflecting EPA’s inspections of the Facility, which identifies the Facility’s Upstream Operations and Downstream Operations, Grandfathered Units, 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, 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 P<sub>2</sub>O<sub>5</sub> 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% P<sub>2</sub>O<sub>5</sub> (by weight), or used as a feedstock in manufacturing Granulated Fertilizer Products, SPA, purified acid, or other chemical manufacturing products, as alleged in the Complaint but denied by Simplot;

(s) “FSA” shall mean Fluorosilicic Acid (H<sub>2</sub>SiF<sub>6</sub>);

(t) “Grandfathered Unit” shall mean a pipe, tank and/or other production, storage, or transportation unit in Downstream Operations specifically identified in the Facility’s Facility Report as not feasibly segregable from Upstream Operations;

(u) “Granulated Fertilizer Products” shall mean the solid ammonium phosphate fertilizer products manufactured in Granulation at the Facility, currently including monoammonium phosphate (MAP), 40 Rock™, and 16-20-0, as identified in the Facility Report.

(v) “Granulation” shall mean the process of converting liquid phosphoric acid, ammonia, secondary nutrients, and/or micronutrients into solid ammonium phosphate fertilizer in Downstream Operations;

(w) “Granulation Recovery System” shall mean the Granulation recovery tanks and wash solution system together with the Granulation Recovery System Units, sumps, collection tank(s), pumps, and piping to enable Simplot to recover the value of cleaning wastes or other materials in the Granulation plant(s) 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(s), as specified and identified in Section VI.B.2 Project Operations of Appendix 4 (Facility Report);

(x) “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 reuse as a

cleaning solution in the Granulation plant(s), sent directly to Granulation for recovery or sent to the Industrial Water Reuse System;

(y) “Industrial Water Reuse System” shall mean the land application system in which certain industrial waters and wastewaters are reused as described in a State of Idaho Reuse Permit I-104-04. The Reuse System includes an elementary neutralization unit;

(z) “Interest” shall mean the interest rate specified in 28 U.S.C. § 1961;

(aa) “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;

(bb) “Merchant Grade Acid” (“MGA”) shall mean phosphoric acid that is typically 52% to 54% (by weight) of  $P_2O_5$  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;

(cc) “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;

(dd) “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;

(ee) “Paragraph” shall mean a portion of this Consent Decree identified by an arabic numeral;

(ff) “Parties” shall mean the United States and Simplot;

(gg) “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);

(hh) “Permit to Construct” means Permit to Construct No. P-2016.0055 issued by Idaho DEQ to Simplot for the Facility on August 19, 2019, under Idaho regulations implementing section 110 of the CAA, 42 U.S.C. § 7410, and any renewals or modifications thereof;

(ii) “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;

(jj) “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;

(kk) “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;

(ll) “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];

(mm) “Purified Phosphoric Acid” (or “PPA”) shall mean a refined grade of phosphoric acid produced by using a First Saleable Product as a feedstock and removing contaminants through various means, including chemical precipitation, filtration, or other physical or adsorption purification processes (e.g., carbon bed) to produce a purified phosphoric acid product suitable for higher purity phosphoric acid applications;

(nn) “RCRA Requirements” shall mean the requirements of RCRA Subtitle C, the applicable regulations in 40 C.F.R. Parts 260-270, and Idaho Hazardous Waste Management Act, Idaho Code 39-4401 *et seq.* and the Rules and Standards for Hazardous Waste, IDAPA 58.01.05;

(oo) “Reclaim Cooling Towers” means the three reclaim cooling towers/evaporative cooling towers at the Facility, which contain a total of eight cells and are subject to requirements in the Permit to Construct and Tier I/Title V Permit;

(pp) “Section” shall mean a portion of this Consent Decree identified by a roman numeral;

(qq) “Simplot” or “Defendant” shall mean J.R. Simplot Company;

(rr) “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);

(ss) “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;

(tt) “Sulfuric Acid Plants” shall mean the process units engaged in the production of sulfuric acid, denominated as the “#300 Plant” and the “#400 Plant,” at the Facility;

(uu) “Superphosphoric Acid” (or “SPA”) shall mean liquid phosphoric acid (not a solid phosphate product such as granulated triple superphosphoric acid) generally with a P<sub>2</sub>O<sub>5</sub> 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;

(vv) “Tier I/Title V Permit” shall mean the air operating permit issued by Idaho DEQ to Simplot for the Facility on July 2, 2020, Permit No. T1-2017.0024, under Idaho regulations implementing 42 U.S.C. §§ 7661-7661(f), and any renewals or replacements thereof;

(ww) “United States” shall mean the United States of America, acting on behalf of EPA;

(xx) “Upstream Operations” shall mean all phosphoric acid mineral processing operations resulting in the manufacture of the First Saleable Product; and

(yy) “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 \$1,500,000.00 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.

11. Simplot shall pay the civil penalty due by FedWire Electronic Funds Transfer (“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 Idaho 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 XV (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 XV (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 90-7-1-08388/23.

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

## V. COMPLIANCE REQUIREMENTS

### RCRA

13. Compliance Projects and Schedule. Simplot shall undertake the actions set forth 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. Hazardous Waste Determinations. 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.

15. Downstream Operations: Wastes or Other Materials. Unless otherwise 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 or Grandfathered 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, Industrial Water Reuse System, 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. Inputs to the Industrial Water Reuse System are limited to those allowed pursuant to the State of Idaho Reuse Permit. 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. Upstream Operations: Phosphoric Acid Scrubber Wastes. 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), as applicable, 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, Mixed-Use Units and Grandfathered 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 or Grandfathered 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), as applicable, 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. Acid Value Recovery System: Wastes or Other Materials Placed Directly in 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, Grandfathered 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 November 10, 2022.

(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, Mixed-Use Units, or Grandfathered 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 or other materials generated from FSA production that are not subject to Paragraphs 20(a) and (b) shall be managed in compliance with RCRA Requirements.

21. Sulfuric Acid Plants. Simplot shall manage hazardous wastes generated at the Facility's Sulfuric Acid Plants in accordance with applicable law.

22. Site Assessment, Groundwater and Surface Water Monitoring, and Corrective Action.

(a) Pursuant to the 2002 RD/RA CD and the 2010 RD/RA CD Amendment, Simplot has been subject to requirements for site assessment, groundwater and surface water monitoring and reporting, and remedial work relating to the Simplot Operable Unit of EMF. EPA and Idaho DEQ have approved Simplot's "Groundwater and Surface Water Monitoring Plan" implementing requirements of the 2010 RD/RA CD Amendment and the 2008 VCO. Simplot has an existing obligation to conduct monitoring and reporting pursuant to its EPA and Idaho DEQ approved September 2020 Groundwater and Surface Water Monitoring Plan. However, in the event Simplot is no longer subject to requirements to perform groundwater and surface water monitoring and reporting under its EPA and Idaho DEQ approved plan (or any update or revised version of that plan), Simplot shall comply with the groundwater and surface water monitoring and reporting requirements set forth in Sections I and II of Appendix 1.A (Groundwater Requirements), unless EPA or Idaho DEQ issues a permit or order containing requirements for a groundwater and surface monitoring plan, or there exists another groundwater monitoring plan that satisfies the requirements of Sections I and II of Appendix 1.A.

(b) Nothing in this Consent Decree affects, modifies or eliminates Simplot's obligation to meet the requirements for assessment and remediation of past releases of hazardous substances at and from the Facility under the 2002 RD/RA CD and 2010 RD/RA CD Amendment, or affects, modifies, or eliminates the United States' reserved rights under Section XIII (Effect of Settlement/Reservation of Rights) except as expressly provided therein.

(c) Nothing in this Consent Decree affects, modifies, or eliminates Idaho DEQ's authority to issue an administrative agreement, permit, or order for Corrective Action.

23. Phosphogypsum Stack System. 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. Inspections and Integrity of Tanks, Sumps, and Secondary Containment. 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. Completed Activities. Simplot has already completed the following activities in compliance with the below referenced Consent Decree Paragraphs or Appendices to the Consent Decree:

(a) Liners. The Parties agree that the Facility's current Phosphogypsum Stack System liner, the design of which was approved by EPA and Idaho DEQ, meets the liner requirements of Appendix 1.B (Phosphogypsum Stack System Construction and Operational Requirements).

(b) Liner Equivalency. 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) Granulation Recovery System and Granulation Re-slurry System. 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. Financial Assurance. 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; and (b) Phosphogypsum Stack System Closure (including long-term care) as required under Appendix 1.C (Closure of Phosphogypsum Stacks/Stack Systems). 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 VIII (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.

28. Provided that Simplot remains in compliance with Section V (Compliance Requirements) or the Continuing Compliance Criteria set forth in Paragraph 40(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 40; 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.

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29. Until the time Simplot implements the compliance measures required under Paragraphs 30-33, Simplot shall continue to route all liquid effluent from absorbers (also referred to as wet scrubbing devices) installed to control emissions from process equipment and take the measures to minimize fluoride emissions from the Reclaim Cooling Towers, as provided in Appendix 9.

30. Simplot is subject to the requirements of the 2016 Consent Order entered into with Idaho DEQ which includes, under paragraph 10.A of that order, as one of the alternative compliance options, that Simplot may replace the Reclaim Cooling Towers with a low emission alternative no later than June 27, 2026, to reduce fluoride emissions from the Facility. Under this Consent Decree, Simplot shall decommission (cease operation of) the Reclaim Cooling Towers and replace their cooling capacity with one or more newly constructed cooling pond(s) no later than June 27, 2026, subject to the provisions of Paragraphs 31-33.

31. The Parties acknowledge that Simplot's ability to comply with Paragraph 30 could be affected by the pendency or final outcome of the Land Exchange Litigation. In the

event that Simplot determines that the pendency or final outcome of the Land Exchange Litigation makes it infeasible for Simplot to implement the requirements of Paragraph 30, either at all or by the deadline set forth therein, Simplot shall so advise EPA by providing a notice, on or before December 31, 2025, that details the basis for Simplot's determination. EPA shall review and promptly notify Simplot whether it agrees with Simplot's determination. If EPA agrees with Simplot's determination, EPA shall notify Simplot that the requirements of Paragraph 30 shall no longer apply, and Simplot shall instead comply with the alternative compliance requirements established under Paragraphs 32-33.

32. If Simplot notifies EPA pursuant to Paragraph 31 that Simplot has determined that compliance with the requirements of Paragraph 30 is infeasible, Simplot shall develop an Alternative Proposed Fluoride Reduction Plan ("Plan") in consultation with EPA and Idaho DEQ that takes into account (1) the impact of the Land Exchange Litigation on Simplot's ability to timely comply, or to comply at all, with Paragraph 30, and (2) the requirements of paragraph 10.A of the 2016 Idaho DEQ Consent Order (or any subsequent Idaho DEQ order modifying or superseding the requirements of paragraph 10.A). Simplot shall submit its Plan under this Paragraph to EPA for approval within ninety (90) days after the date of Simplot's required notice under Paragraph 31.

33. Simplot's Plan under Paragraph 32 shall set forth how and by when Simplot proposes to achieve additional fluoride reductions. The United States and Simplot agree that (a) the Plan must be consistent with fluoride reduction objectives embodied in this Consent Decree to minimize, to the greatest extent practicable, fluoride emissions from the Reclaim Cooling Towers; and (b) nothing in this Paragraph is intended to supersede Simplot's obligations under paragraph 10.A of the 2016 Consent Order (or any subsequent Idaho DEQ order relating

thereto), and Idaho DEQ retains its full authority to determine whether and to what extent any proposed modification of the 2016 Consent Order would be appropriate or should be approved. As applicable, the Plan shall also describe in detail the operational changes or projects Simplot proposes; proposed dates for completion of milestones for the permitting, construction, and final operation of each proposed change or project; the expected reductions in fluoride emissions from each Reclaim Cooling Tower cell; and a means to monitor the expected fluoride emissions reductions resulting from each proposed change or project on an ongoing basis. Review and approval of Simplot's Plan, and performance of actions outlined therein, are subject to and shall be in accordance with Paragraphs 35-39.

#### **CERCLA and EPCRA Reporting**

34. 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 2012, 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**

35. EPA Review of Submissions. 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.

36. If the submission is approved pursuant to Paragraph 35(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 35(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 XI (Dispute Resolution).

37. If the submission is disapproved in whole or in part pursuant to Paragraph 35(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.

38. Any stipulated penalties applicable to the original submission, as provided in Section IX (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.

39. If a resubmitted work plan, report, or other document, or portion thereof, is 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 XI (Dispute Resolution) and EPA's right to seek stipulated penalties under Section IX (Stipulated Penalties). If the resubmission is approved or corrected in whole or in part, Simplot shall proceed in accordance with Paragraph 36. 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.

40. 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 VIII (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.

(b) In the event of a violation subject to Paragraph 40(a), Simplot nevertheless 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 28, 91, 92, and 93, 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 XI (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 IX (Stipulated Penalties), or as limiting the rights reserved by Plaintiff under Section VII (Work Takeover) or Paragraph 94. EPA reserves the right to require, upon written request, that a Correction Plan be submitted to EPA for approval in accordance with Paragraphs 35 through 39. Simplot's compliance with this Paragraph is without prejudice to its rights under Section X (Force Majeure) and Section XI (Dispute Resolution).

41. Permits. Where any compliance obligation under this Section requires Simplot to obtain a permit or approval from a federal, state, or local entity with jurisdiction over the Facility, 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 X (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.

42. Permits Incorporating CAA Requirements. Unless Simplot has provided notice to EPA pursuant to Paragraph 31 of the infeasibility of decommissioning the Reclaim Cooling Towers in compliance with Paragraph 30, Simplot shall by December 31, 2025 submit an administratively complete application to Idaho DEQ to incorporate the following requirement of Paragraph 30 into a federally enforceable permit (other than a Title V permit) so that the requirement will survive termination of this Consent Decree: By June 27, 2026, the Reclaim Cooling Towers shall be decommissioned and their cooling capacity replaced with one or more newly constructed cooling pond(s). If Simplot notifies EPA pursuant to Paragraph 31 that compliance with this requirement of Paragraph 30 is infeasible, Simplot shall submit to Idaho DEQ an administratively complete application that incorporates the provisions of the Plan submitted under Paragraphs 32 and 33 into a federally enforceable permit (other than a Title V

permit) so that the requirements of that Plan will survive the termination of this Consent Decree. Simplot shall submit its application to incorporate the provisions of the Plan into a federally enforceable permit within sixty (60) Days after approval of the Plan by both EPA and Idaho DEQ. Simplot's permit application(s) pursuant to this Paragraph shall request that the federally enforceable non-Title V permit include a statement that the fluoride emission reduction requirements and restrictions were established pursuant to a Consent Decree with EPA and shall not be deleted or modified without the approval of EPA. Simplot shall file any application(s) necessary to incorporate the requirements of such federally-enforceable non-Title V Permit that Idaho DEQ issues in response to Simplot's application into the Tier I/Title V Permit for the Facility in accordance with Idaho's Tier I/Title V rules. Following submission of any permit application(s) required by this Paragraph to Idaho DEQ, Simplot shall cooperate with EPA and Idaho DEQ by promptly submitting to EPA and Idaho DEQ all available information that the applicable agency seeks following its receipt of the application(s), provided the agency has authority to seek such information.

43. Emission Credit Generation. Simplot shall not use any emission reductions that result from actions required by this Consent Decree ("CD Emission Reductions") for the purposes of obtaining project decreases, netting reductions, or emission offset credits, including applying for, obtaining, trading, or selling any emission reductions credits, except that Simplot may use emission reductions from the decommissioning of the Reclaim Cooling Towers pursuant to Paragraph 30 to reduce the estimated emissions from the Project that includes the construction of the cooling pond(s) and the expansion of the Phosphogypsum Stack (eastern and southern expansion) as described in the April 7, 2022 Permit to Construct Application submitted by Simplot to Idaho DEQ. In the event EPA approves and Simplot implements an Alternative



Proposed Fluoride Reduction Plan under Paragraphs 32 and 33, the foregoing exception shall also apply, and Simplot may use the emission reductions from the measures implemented under the approved Plan for any of the purposes listed in the first sentence of this Paragraph.

Utilization of this exception is subject to each of the following conditions:

a. Simplot shall still be subject to all federal and state regulations applicable to new source review permitting under CAA sections 42 U.S.C. §§ 7410, 7470-7492, 7501-7515, including, as applicable, requirements for major or minor sources or modifications whether in attainment, maintenance or nonattainment areas in connection with the use of any such CD Emission Reductions; and

b. Simplot shall provide EPA copies of any permit(s) issued, and other relevant documentation submitted to the permitting authority, for the construction of the cooling ponds and expansion of the Phosphogypsum Stack described in the Permit to Construct Application referenced in this Paragraph, or in any revisions thereto or any subsequent Permit to Construct Application Simplot may submit in connection with said proposed construction and expansion.

## **VI. ENVIRONMENTAL MITIGATION**

44. Simplot agrees to its obligation under this Consent Decree for the environmental mitigation (“the Mitigation”) set forth in Appendix 11, and has selected Idaho DEQ to manage and disburse funding for the Mitigation as described in Appendix 11. Simplot shall contribute \$200,000.00 to Idaho DEQ within thirty (30) Days after the Effective Date of this Consent Decree, which sum is the estimated funding necessary to implement the Mitigation. In accordance with Appendix 11, Idaho DEQ will enter into contracts with the Tribes and the City of Pocatello, Idaho, under which those entities will receive funding to perform the Mitigation

under the oversight of Idaho DEQ. The Mitigation will provide additional resources and actions beyond current CERCLA requirements to address water quality and habitat degradation issues that EPA, in consultation with Idaho DEQ, has concluded are likely associated with Facility operations alleged in the Complaint. Specifically, the removal of invasive plant species and their replacement with native plant species pursuant to the Mitigation required by this Paragraph is expected to contribute to river bank stabilization, sedimentation reduction, and improvement to water quality and the health of the ecosystem that have been affected by the Facility, particularly the operation of the previously unlined Phosphogypsum Stack.

45. Simplot certifies to the truth and accuracy of each of the following:

(a) That, as of the date of executing this Consent Decree, Simplot is not required to perform or develop the Mitigation required under this Section by any federal, state, or local law or regulation, and is not required to perform or develop said Mitigation by agreement, grant, or as injunctive relief awarded in any other action in any forum;

(b) That Simplot was not planning or intending to construct, perform, or implement the Mitigation other than in settlement of the claims resolved in this Consent Decree;

(c) That Simplot has not received and will not receive credit for the Mitigation in any other enforcement action; and

(d) That Simplot shall neither generate nor use any pollutant reductions from the Mitigation as netting reductions, pollutant offsets, or to apply for, obtain, trade, or sell any pollutant reduction credits.

46. Simplot shall have satisfied its obligation to complete the Mitigation requirement under this Section upon both confirmation by Idaho DEQ that the funds for the Mitigation were received by Idaho DEQ and Simplot's submission of a Mitigation Completion Report, as

described in Appendix 11. Simplot may place reasonable reliance on the accuracy of the representations, reports or other information provided by Idaho DEQ to satisfy this obligation.

## **VII. WORK TAKEOVER**

47. 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 10 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.

48. If, after expiration of the period specified in Paragraph 47, 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 47. 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 XI (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.

49. In the event that Simplot invokes Section XI (Dispute Resolution) with respect to EPA's takeover of Work and/or its selection of options set forth in Paragraph 48 (the latter of which, if disputed, must be disputed together with the underlying takeover of Work and pursuant to Paragraph 83(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 XI (Dispute Resolution) of the Consent Decree requiring EPA to terminate such takeover of Work.

50. 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).

### **VIII. REPORTING REQUIREMENTS**

51. 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 52 and 53 relieves Simplot of its obligation to provide the notice required by Section X (Force Majeure).

52. 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 51 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). If Simplot is required to submit an Alternative Proposed Fluoride Reduction Plan pursuant to Paragraphs 32-33, Simplot shall also include in its reports a summary of the results of emissions measurement and monitoring of fluoride emissions conducted pursuant to that Plan.

(b) Thereafter (following the expiration of the period specified in Paragraph 52(a)), and for a period of two (2) years (or, in the case of reporting on the CAA compliance requirements of Paragraphs 29 and 30, until such time as Simplot has fully implemented the requirements of either Paragraph 30 or 32-33, whichever is applicable), Simplot shall submit such reports to EPA on a semi-annual basis.

(c) Thereafter (following the expiration of the period specified in Paragraph 52(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.

53. Whenever any violation of this Consent Decree, or any other event affecting 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 XV (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 51 and 52.

54. All reports shall be submitted to the persons designated to receive notices for the Plaintiff in Section XV (Notices) of this Consent Decree.

55. 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.

56. 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.

57. 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 89 and as otherwise permitted by law.

#### **IX. STIPULATED PENALTIES**

58. 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 X (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.



59. Civil Penalty. 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 63, 64, 66, and 68. 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.

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

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

61. Reporting and Notice Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of the requirements of Section VIII (Reporting Requirements), and Paragraph 103 of Section XV (Notices):

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

62. Other Requirements. The following stipulated penalties shall accrue per violation per Day for each violation of any requirement of this Consent Decree not specifically referenced in Paragraphs 59 through 61 above:

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

63. Subject to the provisions of Paragraph 38, and except as otherwise specified in Paragraph 66(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.

64. 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 XI (Dispute Resolution).

65. Plaintiff, may, in the unreviewable exercise of its discretion, reduce or waive stipulated penalties otherwise due to the Plaintiff under this Consent Decree.

66. Stipulated penalties shall continue to accrue, as provided in Paragraph 63, 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.

67. Obligations Prior to the Effective Date. Upon the Effective Date, the stipulated penalty provisions of this Decree shall be retroactively enforceable with regard to any and all violations of Paragraph 13 relating to achieving milestones for compliance projects numbered 4 through 6, set forth in Section VI (Compliance Projects) of Appendix 4 (Facility Report) and Appendix 6 (RCRA Project Narrative and Compliance Schedule), that have occurred prior to the Effective Date, provided that stipulated penalties that may have accrued prior to the Effective Date may not be collected unless and until this Consent Decree is entered by the Court.

68. 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.

69. Simplot shall not deduct stipulated penalties paid under this Section in calculating its state and federal income tax.

70. 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.

71. Stipulated penalties are not the United States' exclusive remedy for violations of this Consent Decree. Subject to the provisions of Section XIII (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.

#### **X. FORCE MAJEURE**

72. Force majeure, for purposes of this Consent Decree, is defined as any event 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.

73. 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 XV (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 72 and 73 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.

74. 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.

75. 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.

76. If Simplot elects to invoke the dispute resolution procedures set forth in Section XI (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 72 and 73. 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.

#### **XI. DISPUTE RESOLUTION**

77. 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.

78. Informal Dispute Resolution. 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.

79. Formal Dispute Resolution. 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.

80. 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.

81. Simplot may seek judicial review of the dispute by filing with the Court and serving on the United States, in accordance with Section XV (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.

82. 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.

83. Standard of Review.

(a) Disputes Concerning Matters Accorded Record Review. In any dispute 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 106, 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.



84. 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 66. If Simplot does not prevail on the disputed issue, stipulated penalties shall be assessed and paid as provided in Section IX (Stipulated Penalties).

## **XII. INFORMATION COLLECTION AND RETENTION**

85. 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 VII (Work Takeover).

Upon request, EPA and its authorized representatives shall provide Simplot splits of any samples taken by EPA or its authorized representatives.

86. 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

control, or that come into the possession or control, of Simplot or Simplot's contractors 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 VIII (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, or associated with the applicable compliance requirements of Paragraphs 35 and 36. 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 88 to claim privilege.

87. 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.

88. 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 XI (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 XI (Dispute Resolution), that such document or record is not privileged.

89. 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.

90. 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.

### **XIII. EFFECT OF SETTLEMENT/RESERVATION OF RIGHTS**

91. 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 93, 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 through the date of termination of this Consent Decree pursuant to Section XIX (Termination), these claims shall be finally resolved as of the date the Consent Decree terminates.

92. 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 91; and (b) wastes or other materials that Paragraphs 15 through 18 allow to be reused in the Industrial Water Reuse System, or 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 Work that may be required at the Facility pursuant to Plaintiff's authorities under federal law.

93. The resolution under this Section XIII (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 91 and 92), and with respect to those wastes or other materials that Paragraphs 15 through 18 allow to be reused in the Industrial Water Reuse System, or 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 40(b) constitutes compliance with this Consent Decree.

94. 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 91 and 92, 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 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.

95. 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 91, 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 28, 41, 91, 92, and 93, and Paragraphs 1, 9, and 10 of Appendix 2, 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 28, 41, 91, 92, and 93, and Paragraphs 1, 9, and 10 of Appendix 2.

96. 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.

97. This Consent Decree shall not be construed to create rights or obligations in, or grant any cause of action to, any third party.

98. 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, CAA, CERCLA, 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 XI (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.

#### **XIV. COSTS**

99. 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.

## XV. NOTICES

100. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Consent Decree, they shall be sent to the following addresses (documents transmitted to DOJ may be sent either electronically or by mail):

As to DOJ by email:

Eescdcopy.enrd@usdoj.gov  
Re: DJ #90-7-1-08388/23

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. 90-7-1-08388/23

*via overnight service:*

4 Constitution Square  
150 M Street, NE  
Room 2.900  
Washington, DC 20002  
Re: DOJ #90-7-1-08388/23

As to EPA by mail:

Director, Enforcement and Compliance Assurance  
Division  
US EPA Region 10 (20-C04)  
1200 Sixth Avenue, Suite 155  
Seattle, WA 98101

and with respect to notices pertaining to Financial Assurance:

To EPA:

Director, Enforcement and Compliance Assurance  
Division  
US EPA Region 10 (20-C04)  
1200 Sixth Avenue, Suite 155  
Seattle, WA 98101

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

101. Any Party may, by written notice to the other Party, change its designated notice recipient or notice address (including specifying electronic transmission) provided above.

102. 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.

103. Within thirty (30) Days of submission to EPA, Simplot shall also post all (a) documents requiring EPA approval under this Consent Decree, and (b) reports submitted to EPA under Paragraph 52 (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. 1:23-cv-322 (D. Idaho) 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 106, 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 106 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.

#### **XVI. EFFECTIVE DATE**

104. 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 106 of Section XVIII (Modification). Simplot hereby agrees that it shall be bound from the date of its execution of the Consent Decree to perform compliance projects numbered 4 through 6, referenced in Section VI (Compliance Projects) of Appendix 4 (Facility Report), according to the schedule for those projects set forth in Appendix 6 (RCRA Project Narrative and Compliance Schedule), whether or not the milestone dates for those projects set forth in Appendix 6 occur prior to the Effective Date. In the event the United States withdraws or withholds consent to this Consent Decree before entry, or the Court declines to enter the Consent Decree, then the preceding requirement to comply with requirements of this Consent Decree upon the date of execution shall terminate.

#### **XVII. RETENTION OF JURISDICTION**

105. The Court shall retain jurisdiction over this case until termination of this Consent Decree, pursuant to Section XIX (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 XI (Dispute Resolution) and XVIII (Modification), or effectuating or enforcing compliance with the terms of this Consent Decree.

### **XVIII. MODIFICATION**

106. 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 11 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 89 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 108, 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.

107. 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

XVIII (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.

### **XIX. TERMINATION**

108. 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 XVIII (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.

109. 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 VIII (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.

110. 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 XI (Dispute Resolution).

111. 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.

112. Termination. After Simplot has completed the requirements set forth in Paragraphs 109 and 110 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.

113. 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.

114. If the United States does not agree that the Consent Decree may be terminated, Simplot may invoke dispute resolution under Section XI (Dispute Resolution). However, all time periods and deadlines established under Section XI shall be extended by sixty (60) Days, or more by the agreement of the Parties.

115. The parties acknowledge the possibility that future significant operational changes to the Facility may occur, or that future federal or state laws or regulations may be enacted concerning requirements established under the Consent Decree and, if so, either or both might form the basis for a modification to the Consent Decree under Paragraph 106, 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.

**XX. PUBLIC PARTICIPATION**

116. 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.

**XXI. SIGNATORIES/SERVICE**

117. 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.

118. 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.

## **XXII. INTEGRATION**

119. 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.

## **XXIII. FINAL JUDGMENT**

120. 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.

## **XXIV. 26 U.S.C. SECTION 162(f)(2)(A)(ii) IDENTIFICATION**

121. 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 13-36, 40 (except with respect to dispute resolution), 41-42, and related Appendices 1, 2, 4, 5, 6 and 9; Section VI (Environmental Mitigation), Paragraphs 44-46, and related Appendix 11; Section VIII (Reporting Requirements), Paragraphs 51-52 and 54-55; Section XII (Information Collection



and Retention), Paragraphs 85-87; and Section XV (Notices), Paragraph 103, is restitution or required to come into compliance with law.

## **XXV. APPENDICES**

122. 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 Don Plant 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;

Appendix 9 sets forth Operational Practices for Air Emissions Control;

Appendix 10 sets forth Additional Definitions of Terms Used in Appendices;

Appendix 11 describes the Environmental Mitigation required under Section VI.

**WE HEREBY CONSENT** to the entry of the Consent Decree in *United States v. J. R. Simplot Company*, Civil Action No. 1:23-cv-322, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE UNITED STATES OF AMERICA:

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

Date: July 6, 2023

/s/ David Roskam  
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

**WE HEREBY CONSENT** to the entry of the Consent Decree in *United States v. J. R. Simplot Company*, Civil Action No. 1:23-cv-322, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE UNITED STATES OF AMERICA:

JOSHUA D. HURWIT  
United States Attorney  
District of Idaho

Date: July 5, 2023

By: /s/Christine G. England  
CHRISTINE G. ENGLAND, ISB# 11390  
Assistant U.S. Attorney  
District of Idaho  
1290 West Myrtle Street, Suite 500  
Boise, ID 83702  
Telephone: (208) 334-1211  
Facsimile: (208) 334-9375  
Christine.England@usdoj.gov

**WE HEREBY CONSENT** to the entry of the Consent Decree in *United States v. J. R. Simplot Company*, Civil Action No. 1:23-cv-322, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Date: July 7, 2023

/s/ Lawrence Starfield  
LAWRENCE STARFIELD  
Acting Assistant Administrator  
Office of Enforcement and Compliance Assurance  
United States Environmental Protection Agency

Date: July 5, 2023

/s/ Ann Stephanos  
ANN STEPHANOS  
Attorney-Advisor  
Office of Enforcement and Compliance Assurance  
United States Environmental Protection Agency  
Washington, D.C. 20460

**WE HEREBY CONSENT** to the entry of the Consent Decree in *United States v. J. R. Simplot Company*, Civil Action No. 1:23-cv-322, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY:

Date: July 5, 2023

/s/ Beverly Li  
BEVERLY LI  
Regional Counsel  
United States Environmental Protection Agency  
Region 10

Date: July 5, 2023

/s/ Lynne D. Davies  
LYNNE D. DAVIES  
Chief, Waste Enforcement Branch  
Waste and Chemical Enforcement Division  
Office of Enforcement and Compliance Assurance  
United States Environmental Protection Agency  
Washington, D.C. 20460

**WE HEREBY CONSENT** to the entry of the Consent Decree in *United States v. J. R. Simplot Company*, Civil Action No. 1:23-cv-322, subject to the public notice and comment requirements of 28 C.F.R. § 50.7.

FOR SIMPLOT:

Date: July 5, 2023

/s/ James B. Alderman  
JAMES B. ALDERMAN  
Senior Vice President, General Counsel and  
Secretary  
J.R. Simplot Company  
P.O. Box 27  
Boise, ID 83707

Date: July 5, 2023

/s/ Alan L. Prouty  
ALAN L. PROUTY  
Vice President, Environmental & Regulatory  
Affairs  
J.R. Simplot Company  
P.O. Box 27  
Boise, ID 83707

Date: July 5, 2023

/s/ Thomas C. Perry  
THOMAS C. PERRY  
Senior Environmental Counsel  
J.R. Simplot Company  
P.O. Box 27  
Boise, ID 83707  
(208) 780-7430

## Appendix 1

### Operating and Closure Requirements

## **APPENDIX 1.A**

### **GROUNDWATER AND SURFACE WATER REQUIREMENTS**

#### **I. Groundwater and Surface Water Monitoring Plan Requirements**

- (1) The Facility is part of the CERCLA Eastern Michaud Flats Superfund Site (EMF), and in that context the Facility is within the Simplot Operable Unit (OU). The CERCLA remedies for the Simplot OU are documented in the 2001 Remedial Design/Remedial Action Consent Decree with J.R. Simplot Co. (2001 RD/RA CD), and the 2010 Interim Record of Decision Amendment (2010 IRODA). Ongoing groundwater and surface water monitoring are required to assess the performance of the Groundwater remedy for the Simplot OU as described in the 1998 Environmental Protection Agency (EPA) Record of Decision (1998 ROD), the 2001 RD/RA CD, and the 2010 IRODA. Groundwater and Surface Water conditions at the Facility have been investigated and the findings from this investigation have been documented in the 1998 ROD.
- (2) Groundwater and Surface Water monitoring requirements for the Facility are also included in the 2008 Voluntary Consent Order/Compliance Agreement (2008 VCO/CA) between the Idaho Department of Environmental Quality (IDEQ) and the J.R. Simplot Company. The 2008 VCO/CA is intended to work in conjunction with and complement the existing CERCLA remedies as described in the 2001 RD/RA CD.
- (3) Prior to the Effective Date, Simplot prepared a comprehensive Groundwater and Surface Water Monitoring Plan (Formation Environmental. Revised Draft Groundwater and Surface Water Monitoring Plan Revision 2, Simplot Operable Unit, Eastern Michaud Flats Superfund Site, Pocatello, Idaho. September 2020) and is currently performing Groundwater and Surface Water monitoring according to that plan. The September 2020 Groundwater and Surface Water Monitoring Plan is an update to the plans that were submitted to EPA and the State of Idaho in 2010 and 2016. Attachment A provides a summary of this September 2020 Groundwater and Surface Monitoring Plan. The September 2020 Groundwater and Surface Water Monitoring Plan involves a total of 122 wells that are sampled on a quarterly, semi-annual or annual basis. The September 2020 Groundwater and Surface Water Monitoring Plan meets the requirements of Section 1(6) of this Appendix 1.A.



- (4) Monitoring shall occur as required by the September 2020 Groundwater and Surface Water Monitoring Plan (and subsequent revisions) implementing the 2010 IRODA and the 2008 VCO/CA after the Effective Date.
- (5) If the Groundwater and Surface Water monitoring requirements contained in the 2010 IRODA or other subsequent CERCLA orders and the 2008 VCO/CA are terminated, then Simplot will maintain an EPA and IDEQ approved plan by complying with Section I.(6), Monitoring Plan Requirements, unless the IDEQ or EPA issues a permit or order containing requirements for a Groundwater monitoring plan, or there exists another Groundwater and Surface Water monitoring plan that satisfies the requirements of Section 1.(6), below, that has been approved by Idaho DEQ and EPA.
- (6) Monitoring Plan Requirements
  - (a) Using pertinent information (including the examples listed from (b)(i) through (b)(vi) below), Simplot shall provide EPA with a plan containing findings and recommendations for Groundwater and Surface Water monitoring derived from site-specific information. The Groundwater and Surface Water 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 Idaho 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)<sup>1</sup>;
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 drainage systems surrounding the Facility;
6. Geophysical methods (as appropriate) such as ground penetrating radar surveys; and
7. Phosphogypsum disposal rate and chemical characterization.

(ii) Other pollution sources located within one-mile radius of the Facility about which Simplot has information or knowledge.

(iii) Inventory depth, construction details, and cones of depression of water supply wells and monitoring wells located within one-mile radius of the Facility or potentially affected by the discharge.

(iv) Chronological information for the past ten (10) years (as available) on water levels in the monitoring wells and water quality data on water samples collected from the water supply and monitoring wells.

(v) Chronological information for the past ten (10) years on Surface Water flows and water quality upstream and downstream from the Facility.

(vi) Relevant land use history of construction and land development adjacent to the Facility.

## **II. Groundwater and Surface Water Reporting and Assessment Requirements**

(1) Groundwater and Surface Water monitoring data shall be reported as follows:

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<sup>1</sup> See IDAPA 58.01.11.007.02, which defines "Aquifer" as a geological unit of permeable saturated material capable of yielding economically significant quantities of water to wells and springs.

*Simplot Don Plant Consent Decree  
Appendix 1.A*

- (a) Monthly reporting. Data collected as part of the additional Groundwater monitoring requirements in the Phosphoric Acid Plant (PAP) Area will be reported by the end of the month following the completion of the data collection program for that month (e.g., by August 31 for July).
- (b) Quarterly reporting. Data from each quarterly monitoring event will be reported by the end of the following quarter (e.g., by June 30 for the first calendar quarter).
- (c) Annual reporting. Annual reports will be prepared to provide additional information and data analysis. The reports will be provided by March 31 of the following year.
- (2) Assessment. Data will be evaluated to determine the position of affected Groundwater and to assess trends. Interpreting the adequacy of the reduction in extent and concentration of contaminants of concern (COCs) in the Don Plant Area will be performed as described in Section 3.1 of the September 2020 Groundwater and Surface Water Monitoring Plan implementing the 2010 IRODA and the 2008 VCO/CA. Tracking tools include time-series plots and statistical tests of trends in the concentration of indicator constituents.
- (3) When requested by Idaho DEQ and/or EPA, Simplot shall inform Idaho DEQ and/or EPA of the next sampling schedule so that a representative of either Agency may be present.
- (4) Reporting and assessment requirements in Section 7 of the September 2020 Groundwater and Surface Water Monitoring Plan meet the reporting and assessment requirements in Section II(1) through (3) of this Appendix 1.A.
- (5) Reporting and assessment shall occur as required by Section 7 of the September 2020 Groundwater and Surface Water Monitoring Plan (and subsequent revisions) implementing the 2010 IRODA and the 2008 VCO/CA after the Effective Date.
- (6) If the Groundwater and Surface Water reporting and assessment requirements contained in the 2010 IRODA or other CERCLA orders and the 2008 VCO/CA are terminated, then Simplot will conduct reporting and assessment by complying with the requirements in Section II(1) through (3) of this Appendix 1.A, unless the IDEQ or EPA issues a permit or order containing Groundwater and Surface Water reporting and assessment requirements, or there exists another Groundwater and Surface Water monitoring plan with reporting and assessment requirements that satisfies the requirements of Section II(1) through (3) of this Appendix 1.A that has been approved by Idaho DEQ and EPA.

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# **GROUNDWATER AND SURFACE WATER MONITORING PLAN EXECUTIVE SUMMARY**

## ***Simplot Don Plant Pocatello, Idaho***

February 2021

*Prepared for:*

**J.R. Simplot Company**

P.O. Box 912

1130 West Highway 30

Pocatello, ID 83204

*Prepared by:*



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## ACRONYMS AND ABBREVIATIONS

AFLB	American Falls Lake Bed
AOC	Administrative Order on Consent
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	Contaminant of Concern
DAPL	Dense Phase Aqueous Liquid
EMF Site	Eastern Michaud Flats Superfund Site
EPA	Environmental Protection Agency
FS	Feasibility Study
GWPS	Groundwater Protection Standard
IDEQ	Idaho Department of Environmental Quality
IRODA	Interim Amendment to the Record of Decision
MCL	Maximum Contaminant Level
mg/L	milligrams per liter
OU	Operable Unit
pH	hydrogen ion activity
PAP	Phosphoric Acid Plant
POC	Point of Compliance
QA/QC	Quality Assurance/Quality Control
RBC	Risk-Based Concentration
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
ROD	Record of Decision
SOW	Remedial Design/Remedial Action Consent Decree Statement of Work
TDS	total dissolved solids
TMDL	Total Maximum Daily Load

*Groundwater and Surface Water Monitoring Plan Summary*

*Simplot Don Plant*

*February 2021*

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TCLP            Toxicity Characteristic Leaching Procedure

UCL            Upper Confidence Limit

VCO/CA Voluntary Consent Order/Compliance Agreement



## 1.0 Introduction

This document provides an executive summary of the groundwater and surface water monitoring plan for the Simplot Don Plant. The Don Plant is included in the Simplot Operable Unit (OU) of the Eastern Michaud Flats Superfund Site (the "EMF Site") located near Pocatello, Idaho (Figure 1-1). Groundwater and surface water monitoring are required to assess the performance of the groundwater remedy for the Simplot OU as described in the Environmental Protection Agency (EPA) Record of Decision (ROD; EPA 1998) and Interim Record of Decision Amendment (IRODA; EPA 2010). This document complies with the Remedial Design/Remedial Action Consent Decree (EPA 2002), as amended in 2010 (hereafter "Consent Decree") and has also been prepared per the requirements of a Voluntary Consent Order/Compliance Agreement (VCO/CA) between the Idaho Department of Environmental Quality (IDEQ) and the J.R. Simplot Company (Simplot) (IDEQ 2008).

This groundwater and surface water monitoring plan summary is organized as follows:

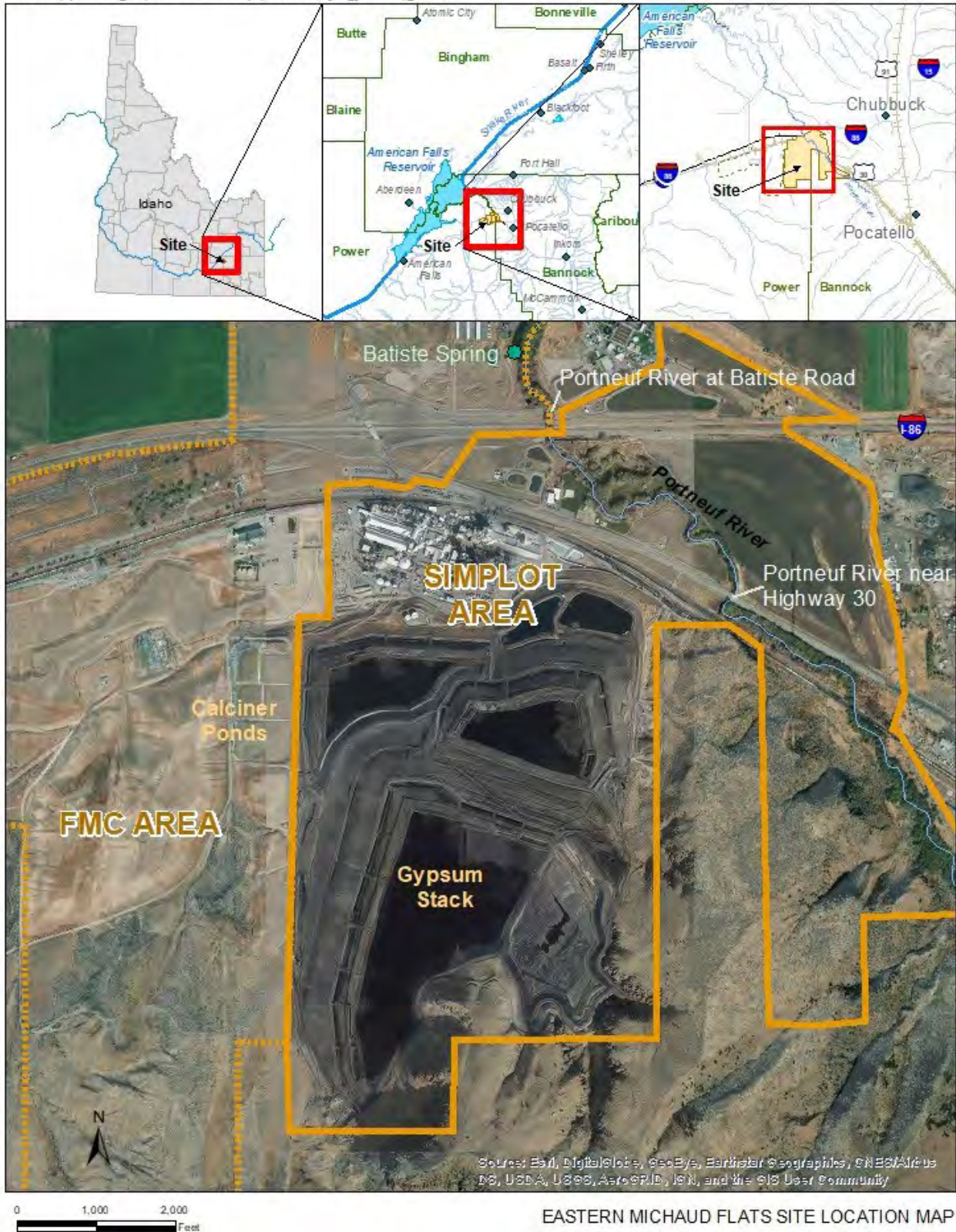
- ❑ Section 1 contains the Site description, project history, and groundwater monitoring history.
- ❑ Section 2 describes the groundwater and surface water monitoring program, including sampling locations, sampling frequency, and data analysis methods.
- ❑ Section 3 provides information on reporting requirements.
- ❑ Section 4 lists the references cited.

Groundwater and Surface Water Monitoring Plan Summary

Simplot Don Plant

February 2021

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EASTERN MICHAUD FLATS SITE LOCATION MAP

Figure 1-1: Site Location Map



## 1.1 Site Description

The J.R. Simplot Don Plant is located near the City of Pocatello. The Don Plant produces phosphoric acid and a variety of liquid and solid fertilizers. The Don Plant covers approximately 745 acres and adjoins the eastern property boundary of the FMC facility. The main portion of the plant lies approximately 500 feet southwest of the Portneuf River. Of the 745 acres, approximately 400 acres are committed to the gypsum stack, and 185 acres are occupied by the plant and plant infrastructure. A significant portion of the remaining acreage to the south and southeast of the plant consists of steep cliffs and rugged terrain. A Union Pacific Railroad right-of-way is adjacent to the northern fence line of the Don Plant and passes through the northern portion of the Simplot OU, paralleling Highway 30. Access to the Don Plant is via Interstate 86 and Highway 30.

The Don Plant began production of a single superphosphate fertilizer in 1944. Phosphoric acid production began in 1954. The plant currently produces a variety of solid and liquid phosphorus- and nitrogen-based fertilizers. The principal raw material for the process is phosphate ore, which is transported to the facility via a slurry pipeline from the Smoky Canyon Mine. The primary byproduct from the Don Plant process is gypsum (calcium sulfate) which is stacked on site.

## 1.2 Site History

An Administrative Order on Consent (AOC) pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was issued by the EPA on May 30, 1991 and entered into voluntarily by FMC and Simplot. The AOC specified requirements for implementation of a Remedial Investigation (RI) to describe EMF Site conditions and a Feasibility Study (FS) to evaluate remedial alternatives to address potential risks to human health and the environment. Based on the findings of these studies, EPA issued a ROD (EPA 1998), specifying the selected remedial actions for the EMF Site on June 8, 1998. A Remedial Design/Remedial Action Consent Decree (EPA 2002), which specified the conditions for implementing the selected remedial actions in the Simplot OU, was entered into by Simplot and EPA on May 9, 2002. Consistent with the requirements of the Consent Decree, Simplot completed the design and installation of a groundwater extraction and monitoring system in a phased approach over the period from 2003 through 2012. Details regarding the completion of the system are in the Groundwater Extraction and Monitoring System Construction Completion Report (Formation 2012).

On April 11, 2008, Simplot signed the VCO/CA with IDEQ. The VCO/CA is intended to provide for implementation of Simplot's responsibilities at the Don Plant fertilizer manufacturing facility under the approved TMDL for nutrients for the Lower Portneuf River. Under the VCO/CA Simplot is required to install a liner on the operating gypsum stack and continue to operate the CERCLA groundwater extraction system. The groundwater and surface water monitoring outlined in this revised plan will be used to assess the effectiveness of remedial actions in achieving the VCO/CA cleanup requirements in the Portneuf River.

In January 2010, EPA issued an IRODA for the Simplot OU (EPA 2010). The IRODA adds the hazardous substance phosphoric acid (measured as total phosphorus or dissolved orthophosphate) as a Contaminant of Concern (COC) and provides for source control of COCs from the Simplot OU to the extent practicable, including the installation of a liner on the gypsum stack to reduce infiltration to groundwater.

## 1.3 Hydrogeologic Setting

The Simplot OU of the EMF Site is located at the base of the northern slope of the Bannock Range and along the western flank of the Portneuf Valley, where the range and river valley merge with the Snake River Plain in the area known as Michaud Flats. The southern portion of the Simplot Plant Area, which includes the gypsum stacks, is located on the northern flank of the Bannock Range. The northern portion of the Simplot OU includes the holding ponds north of Highway 30 and is located in the eastern portion of Michaud Flats adjacent to the Portneuf River. The central portion of the facility, where most of the plant facilities are located, is at the base of the Bannock

Range where subsurface deposits represent a combination of materials derived from erosion of nearby hills and mountains and materials deposited by the Portneuf River.

The geology and hydrogeology of the Bannock Range, Portneuf Valley, and Michaud Flats have been described by previous investigators (West and Kilburn 1963, Trimble 1976, Jacobson 1984, Spinazola and Higgs 1998, and Othberg 2002). A comprehensive discussion of regional and site-specific geology and hydrogeology is presented in the RI report (Bechtel 1996). Based on hydrogeologic properties, geologic strata in the Simplot Area can be divided into four hydrostratigraphic units: the Tertiary volcanics (also referred to as bedrock), the Upper Zone which consists of the Michaud Gravel that overlies the American Falls Lake Bed clay (AFLB), the AFLB itself, which is a local confining unit, and the Lower Zone, which consists of the materials below the AFLB.

## 2.0 Monitoring program

### 2.1 Groundwater Monitoring

The groundwater monitoring program is divided into five monitoring program areas based on monitoring objective as follows:

- ❑ Tracking groundwater quality in the Don Plant Area;
- ❑ Demonstrating source control in the PAP Area;
- ❑ Demonstrating hydraulic control in the Target Capture Zones;
- ❑ Evaluating reduction in the extent and concentration in the Assessment Area;
- ❑ Evaluating migration of COCs into the Off-Plant Area.

#### 2.1.1 Tracking Groundwater Quality in the Don Plant Area

The wells in the Don Plant Area that are monitored, the sampling frequency and the data that are collected are listed in Table 2-1. Monitoring well locations are shown in Figure 2-1. A total of 122 wells are in the groundwater monitoring system in the Don Plant Area. Samples of groundwater are collected and analyzed from 94 Don Plant Area wells for the indicator analytes listed in Table 2-2. Water levels only are measured at the other 28 wells in the Don Plant Area. The following data are collected to evaluate the reduction of the extent and concentration of COCs in the Don Plant Area:

- ❑ Quarterly groundwater level measurements in a network of monitoring wells in the Don Plant Area; and
- ❑ Quarterly, semi-annual or annual groundwater sample collection and analysis from a network of monitoring wells in the Don Plant Area, depending on specific location.

Groundwater quality and groundwater levels are expected to vary over time as source controls are implemented at the gypsum stack and in the PAP Area. Data will be evaluated to determine the position of affected groundwater and assess trends.

**Table 2-1: Groundwater Quality and Water Level Monitoring Locations, Don Plant Area.**

Monitoring Location	Hydro-stratigraphic Unit	Sampling Schedule	Analyses	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
189	Upper Zone	Quarterly	GWL, WQ	4560.72	178	187.5
190	Bedrock	SA (Q2, Q4)	GWL, WQ	4541.56	223	232.5
191	Bedrock	SA (Q2, Q4)	GWL, WQ	4579.85	175	184.5
301	Upper Zone	No Sampling	GWL	4735.73	170.3	180
304	Bedrock	No Sampling	GWL	4662.42	275.5	290.2
305	Bedrock	SA (Q2, Q4)	GWL, WQ	4566.47	280	300
307	Upper Zone	Quarterly	GWL, WQ	4561.83	162	172
308	Upper Zone	Quarterly	GWL, WQ	4541.49	150.8	170.8
309	Lower Zone	Quarterly	GWL, WQ	4458.14	148	168
310	Upper Zone	Quarterly	GWL, WQ	4458.64	82	87
312	Upper Zone	SA (Q2, Q4)	GWL, WQ	4451.13	89	97.7
313	Bedrock	SA (Q2, Q4)	GWL, WQ	4462.86	106	111
315	Deep	SA (Q2, Q4)	GWL, WQ	4462.73	120	140
316	Upper Zone	No Sampling	GWL	4462.91	82	87
317	Lower Zone	SA (Q2, Q4)	GWL, WQ	4445.62	109.7	129.7
318	Upper Zone	Quarterly	GWL, WQ	4448.99	60	80
319	Lower Zone	Annual (Q2)	GWL, WQ	4441.77	140	160
320	Upper Zone	Quarterly	GWL, WQ	4441.71	55.4	70.4
321	Lower Zone	No Sampling	GWL	4416.37	136.9	156.5
322	Lower Zone	No Sampling	GWL	4415.08	133.5	143.2
324	Upper Zone	SA (Q2, Q4)	GWL, WQ	4455.13	97.5	102.5
325	Upper Zone	Quarterly	GWL, WQ	4451.83	74.6	79.6
326	Lower Zone	Quarterly	GWL, WQ	4452.23	105	110
327	Upper Zone	SA (Q2, Q4)	GWL, WQ	4433.29	59	69
328	Upper Zone	Annual (Q2)	GWL, WQ	4414.35	45	55
329	Lower Zone	SA (Q2, Q4)	GWL, WQ	4451.94	127.5	137.5
330	Lower Zone	Annual (Q2)	GWL, WQ	4445.34	145.7	165.7
331	Upper Zone	Quarterly	GWL, WQ	4445.6	65.5	75.5
332	Upper Zone	Quarterly	GWL, WQ	4451.17	66.3	76.3

**Table 2-1: Groundwater Quality and Water Level Monitoring Locations, Don Plant Area.**

Monitoring Location	Hydro-stratigraphic Unit	Sampling Schedule	Analyses	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
333	Upper Zone	Quarterly	GWL, WQ	4579.54	159	169
334	Upper Zone	Quarterly	GWL, WQ	4446.98	63.5	73.5
335D	Lower Zone	Quarterly	GWL, WQ	4444.82	102	112
335S	Upper Zone	Quarterly	GWL, WQ	4444.93	70	80
337	Lower Zone	No Sampling	GWL	4455.33	117.6	157.6
338	Upper Zone	Quarterly	GWL, WQ	4455.79	58.7	78.7
339	Upper Zone	No Sampling	GWL	4456.86	56	76
340	Upper Zone	Quarterly	GWL, WQ	4443.9	61.0	76.0
341	Upper Zone	Quarterly	GWL, WQ	4450.45	65.5	80.5
342	Upper Zone	SA (Q2, Q4)	GWL, WQ	4462.48	61.5	76.5
344	Lower Zone	No Sampling	GWL	4457.75	130.8	145.8
347	Lower Zone	SA (Q2, Q4)	GWL, WQ	4439.92	104.4	124.4
348	Upper Zone	SA (Q2, Q4)	GWL, WQ	4439.96	53.97	73.97
350	Upper Zone	Quarterly	GWL, WQ	4441.48	77	81.5
351	Bedrock	SA (Q2, Q4)	GWL, WQ	4460.3	74.8	84.3
352	Bedrock	No Sampling	GWL	4471.9	95	104.5
353	Upper Zone	No Sampling	GWL	4449.76	75	84.5
354	Upper Zone	SA (Q2, Q4)	GWL, WQ	4463.76	80	94.5
356	Upper Zone	Quarterly	GWL, WQ	4458.18	72	81.5
357	Upper Zone	SA (Q2, Q4)	GWL, WQ	4488.56	100	109.5
360	Upper Zone	SA (Q2, Q4)	GWL, WQ	4464.25	75	85
361AR	Lower Zone	Quarterly	GWL, WQ	4452.42	100.2	110.2
361BR	Lower Zone	No Sampling	GWL	4452.22	169.3	179.3
361CR	Lower Zone	No Sampling	GWL	4452.19	224.5	234.5
361DR	Bedrock	No Sampling	GWL	4452.18	264.6	274.6
362	Upper Zone	Quarterly	GWL, WQ	4451.78	64.63	74.63
363AR	Lower Zone	Quarterly	GWL, WQ	4454.08	106	116
363BR	Lower Zone	No Sampling	GWL	4454.08	136	146
363CR	Bedrock	No Sampling	GWL	4454.08	173.9	183.9

**Table 2-1: Groundwater Quality and Water Level Monitoring Locations, Don Plant Area.**

Monitoring Location	Hydro-stratigraphic Unit	Sampling Schedule	Analyses	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
364AR	Lower Zone	Quarterly	GWL, WQ	4450.06	96.5	106.5
364BR	Lower Zone	No Sampling	GWL	4450.06	126.6	136.6
364CR	Bedrock	No Sampling	GWL	4450.06	155.7	160.7
365	Upper Zone	Quarterly	GWL, WQ	4446.77	56.24	66.24
366AR	Lower Zone	SA (Q2, Q4)	GWL, WQ	4445.73	94.1	104.1
366BR	Lower Zone	No Sampling	GWL	4445.73	118.9	123.9
366CR	Bedrock	No Sampling	GWL	4445.73	143.1	153.1
367	Upper Zone	Quarterly	GWL, WQ	4445.38	57.95	72.95
368AR	Lower Zone	No Sampling	GWL	4444.1	154.6	164.6
368BR	Bedrock	No Sampling	GWL	4443.66	184.2	195.2
369A	Upper Zone	Quarterly	GWL, WQ	4446.24	53.9	63.9
369B	Upper Zone	Quarterly	GWL, WQ	4446.27	67.7	72.7
370	Upper Zone	Quarterly	GWL, WQ	4446.49	56	71
371A	Upper Zone	Quarterly	GWL, WQ	4447.71	59	73.8
371B	Upper Zone	Quarterly	GWL, WQ	4447.72	82	91.8
372A	Upper Zone	Quarterly	GWL, WQ	4444.96	56.5	71.5
372B	Upper Zone	Quarterly	GWL, WQ	4444.96	76.4	81.4
373	Upper Zone	Quarterly	GWL, WQ	4442.12	55	70
374	Upper Zone	Quarterly	GWL, WQ	4441.18	55.4	70.4
375	Upper Zone	SA (Q2, Q4)	GWL, WQ	4447.33	57.78	67.78
376A	Lower Zone	No Sampling	GWL, WQ	4450.58	105.31	110.31
376B	Lower Zone	SA (Q2, Q4)	GWL, WQ	4450.61	126.03	136.03
376C	Lower Zone	SA (Q2, Q4)	GWL, WQ	4450.61	156.42	166.42
377A	Upper Zone	Quarterly	GWL, WQ	4447.1	60.2	70.2
377B	Upper Zone	Quarterly	GWL, WQ	4447.13	74.7	79.7
378	Upper Zone	Quarterly	GWL, WQ	4445.42	60	65
379	Upper Zone	Quarterly	GWL, WQ	4442.22	81.4	91.2
380	Upper Zone	Quarterly	GWL, WQ	4440.23	74.4	84.2
381	Upper Zone	No Sampling	GWL, WQ	4557.03	154.7	169.7



**Table 2-1: Groundwater Quality and Water Level Monitoring Locations, Don Plant Area.**

Monitoring Location	Hydro-stratigraphic Unit	Sampling Schedule	Analyses	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
382	Upper Zone	SA (Q2, Q4)	GWL, WQ	4479.99	239.7	254.7
383A	Upper Zone	Quarterly	GWL, WQ	4447.42	60.2	75.2
383B	Upper Zone	Quarterly	GWL, WQ	4447.78	82.2	92.2
384A	Upper Zone	Quarterly	GWL, WQ	4447.02	58.1	68.1
384B	Upper Zone	Quarterly	GWL, WQ	4446.95	72.6	82.6
385	Upper Zone	Quarterly	GWL, WQ	4445.92	58.2	93.2
386A	Upper Zone	Quarterly	GWL, WQ	4439.35	50.2	65.2
386B	Upper Zone	Quarterly	GWL, WQ	4439.39	72.2	82.2
401	Upper Zone	Quarterly	GWL, WQ	4555.84	174.7	204.7
402	Upper Zone	Quarterly	GWL, WQ	4543.2	174.5	215
403	Upper Zone	No Sampling	GWL	4474.75	68	88
404	Upper Zone	Quarterly	GWL, WQ	4475.84	75	95
405	Upper Zone	No Sampling	GWL	4468.54	65.5	85.5
406	Upper Zone	Quarterly	GWL, WQ	4463.76	67	87
407	Upper Zone	Quarterly	GWL, WQ	4474.78	76.5	96.5
408	Upper Zone	No Sampling	GWL, WQ	4457.42	65.5	85.5
409	Upper Zone	No Sampling	GWL, WQ	4456.08	59.5	79.5
410	Lower Zone	No Sampling	GWL	4456.43	120	160
411	Lower Zone	Quarterly	GWL, WQ	4458.3	115.5	155.5
412	Upper/Lower Zone	Quarterly	GWL, WQ	4451.72	57.3	179.4
413	Upper/Lower Zone	Quarterly	GWL, WQ	4447.46	53	134
414	Upper Zone	Quarterly	GWL, WQ	4447.49	60.5	70.5
415	Upper/Lower Zone	Quarterly	GWL, WQ	4459.06	72.9	145.8
416	Upper Zone	Quarterly	GWL, WQ	4444.27	56.3	71.3
417	Upper Zone	Quarterly	GWL, WQ	4444.21	56.9	71.9
418	Upper Zone	Quarterly	GWL, WQ	4442.09	60	80
419	Upper Zone	Quarterly	GWL, WQ	4445.93	60.3	85.3

**Table 2-1: Groundwater Quality and Water Level Monitoring Locations, Don Plant Area.**

Monitoring Location	Hydro-stratigraphic Unit	Sampling Schedule	Analyses	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
420	Upper Zone	Quarterly	GWL, WQ	4442.38	60	90
421	Upper/Lower Zone	Quarterly	GWL, WQ	4448.31	52.3	126
422	Upper/Lower Zone	Quarterly	GWL, WQ	4456.88	65.4	206.1
423	Upper Zone	Quarterly	GWL, WQ	4446.35	60	95
424	Upper Zone	Quarterly	GWL, WQ	4445.85	60	85
SWP-4	Lower Zone	Quarterly	WQ	4447.5	148.0	218.0
SWP-5	Lower Zone	Quarterly	WQ	4447.3	185.0	250.0
SWP-7	Lower Zone	Quarterly	WQ	4441.0	180.0	290.0

Notes: 1 – Water quality samples will only be obtained from extraction wells if they are active

Feet amsl = feet above mean sea level

Feet bgs = feet below ground surface

**Table 2-2: Indicator Analyte List for Groundwater**

Analyte	Method	Reporting Limit (RL) or Field Meter Sensitivity	Units
<b>Field Parameters</b>			
Oxidation Reduction Potential	Field Meter	1	mV
Oxygen, Dissolved	Field Meter	0.1	mg/L
pH	Field Meter	±0.1	SU
Specific Conductance	Field Meter	5	µmho/cm
Temperature	Field Meter	0.1	°C
Turbidity	Field Meter	±0.1	NTU
<b>General Chemistry</b>			
Alkalinity, Total as CaCO <sub>3</sub>	SM 2320B	1	mg/L
Chloride	EPA 300.0	0.2	mg/L
Hardness	SM 2340B	1.07	mg/L
Sulfate	EPA 300.0	0.3	mg/L
TDS	SM 2540C	10	mg/L
<b>Metals</b>			
Arsenic	EPA 200.8	0.003	mg/L
Calcium	EPA 200.7	0.1	mg/L
Magnesium	EPA 200.7	0.2	mg/L
Potassium	EPA 200.7	0.5	mg/L
Sodium	EPA 200.7	0.5	mg/L
<b>Nutrients</b>			
Nitrite+Nitrate as N	EPA 353.2	0.05	mg/L
Phosphorus, Total	SM 4500 PE	0.01	mg/L

## Notes:

SU	= Standard Units
µmho/cm	= micro mhos per centimeter
°C	= degrees Centigrade
mg/L	= milligrams per liter
NTU	= Nephelometric Turbidity Units

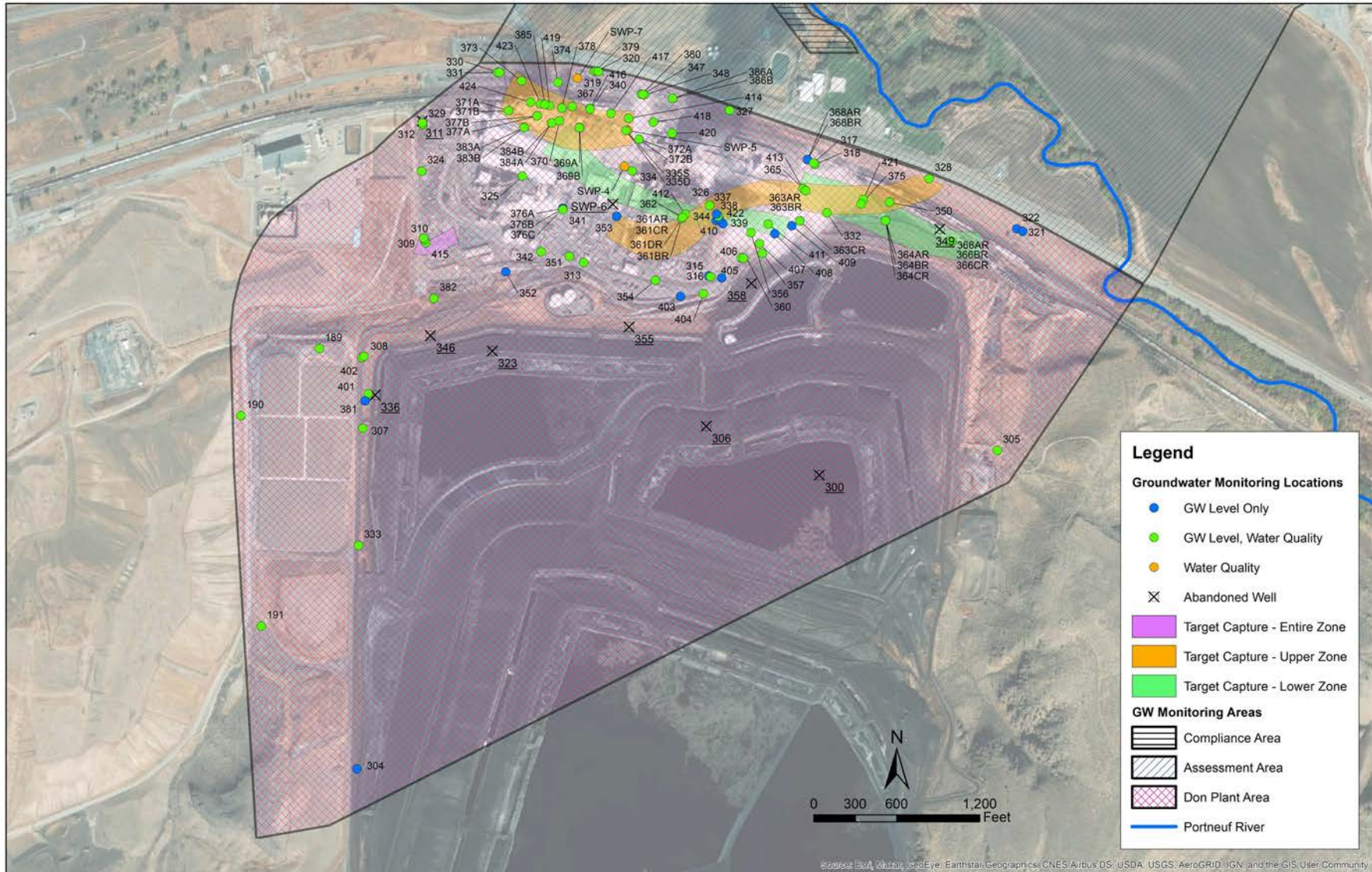


Figure 2-1: Monitoring Locations in the Don Plant Area

### 2.1.2 Demonstrating Source Control in the PAP Area

Groundwater monitoring is performed in selected wells in the PAP Area. Groundwater quality data are used to assess changes in water quality over time and to help evaluate source control effectiveness. Additional data are collected from a network of 42 monitoring and extraction wells in the PAP Area (Table 2-3). The well locations are shown in Figure 2-2. The following data are collected to evaluate source control in the PAP Area; the scope of the data collection program varies based on field observations:

- Monthly pH measurements are made at the top and bottom of the well screen interval in monitoring wells and at the groundwater level in extraction wells (Table 2-3), Quarterly, semi-annual or annual groundwater samples are collected from the mid-point of the well screen interval (Table 2-1) and analyzed for indicator parameters (Table 2-2) as part of the EMF Site-wide sampling effort. Quarterly groundwater level measurements from the PAP Area wells (Table 2-3) are performed as part of the EMF site-wide sampling effort,
- More frequent groundwater sample collection and analysis from the monitoring and extraction well network occurs based on the results of the in situ pH measurements made at the bottom of the well screen interval as follows:
  - If the pH in a PAP Area well is less than 5 SU at the bottom of the well screen interval then a groundwater sample will be collected from the bottom of the well screen interval and analyzed for a list of area-specific indicator parameters (Table 3-4). If the results of sampling indicate that the total phosphorus concentration is elevated above the upgradient concentration (see below for definition) then groundwater samples will be collected from the well biweekly (i.e., every other week) and analyzed for indicator parameters.
  - If the pH in a PAP Area well is less than 4 SU then the biweekly groundwater quality samples will be analyzed for an expanded list of parameters that includes both indicator parameters and total metals (Table 2-5).
  - If the concentration of any of the metals reaches levels considered characteristic of hazardous waste (Table 2-6), a duplicate sample will be analyzed by the Toxicity Characteristic Leaching Procedure (TCLP) according to the methods listed in Table 2-6. TCLP analyses will be performed as necessary to confirm the results of total metals analyses.
- Annual groundwater quality profiles (pH and specific conductance) from PAP Area wells 377A/B, 379, 384A/B, 385 and 424 are collected to monitor conditions related to the presence of dense aqueous phase liquids (DAPLs) that pooled on the top of the AFLB clay. In addition, if the pH in any of the wells in the PAP Area decreases to 3.5 or below as observed during quarterly sampling a water quality profile will be conducted.

The quality assurance/quality control (QA/QC) procedures for groundwater sampling are different for the samples collected biweekly and the samples collected quarterly, semi-annually or annually. Any change in the biweekly monitoring program is implemented as soon as conditions warrant.

**Table 2-3: Locations for Additional Data Collection, Phosphoric Acid Plant Area.**

Monitoring Location <sup>1</sup>	Relative Location	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
320	Downgradient	4441.71	55.4	70.4
325	Upgradient	4451.83	74.6	79.6
331	Downgradient	4445.6	65.5	75.5
334	Upgradient	4446.98	63.5	73.5
335S	Within PAP	4444.93	70	80
340	Downgradient	4443.9	61.0	76.0
341	Upgradient	4450.45	65.5	80.5
348	Downgradient	4439.96	53.97	73.97
353	Upgradient	4449.76	75	84.5
362	Upgradient	4451.78	64.63	74.63
367	Downgradient	4445.38	57.95	72.95
369A	Within PAP	4446.24	53.9	63.9
369B	Within PAP	4446.27	67.7	72.7
370	Within PAP	4446.49	56	71
371A	Within PAP	4447.71	59	73.8
371B	Within PAP	4447.72	82	91.8
372A	Within PAP	4444.96	56.5	71.5
372B	Within PAP	4444.96	76.4	81.4
373	Downgradient	4442.12	55	70
374	Downgradient	4441.18	55.4	70.4
377A	Within PAP	4447.10	60.2	70.2
377B	Within PAP	4447.13	74.7	79.7
378	Downgradient	4445.42	60	65
379	Downgradient	4442.22	81.4	91.2
380	Downgradient	4440.23	74.4	84.2
383A	Within PAP	4447.42	60.2	75.2
383B	Within PAP	4447.78	82.2	92.2
384A	Within PAP	4447.02	58.1	68.1
384B	Within PAP	4446.95	72.6	82.6
385	Downgradient	4445.92	58.2	93.2

**Table 2-3: Locations for Additional Data Collection, Phosphoric Acid Plant Area.**

Monitoring Location <sup>1</sup>	Relative Location	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
386A	Downgradient	4439.35	50.2	65.2
386B	Downgradient	4439.39	72.2	82.2
414	Downgradient	4447.49	60.5	70.5
416	Downgradient	4444.27	56.3	71.3
417	Downgradient	4444.21	56.9	71.9
418	Downgradient	4442.09	60	80
419	Downgradient	4445.93	60.3	85.3
420	Downgradient	4442.38	60	90
423	Downgradient	4446.35	60	95
424	Downgradient	4445.85	60	85

Notes: <sup>1</sup> All wells are in the Upper Zone

Feet amsl = feet above mean sea level; Feet bgs = feet below ground surface

Table 2-4: PAP Area Indicator Analyte List <sup>1</sup>

Analyte	Method	Reporting Limit (RL)	Units
<b>Field Parameters</b>			
pH	Field	±0.1	SU
Specific Conductance	Field	5	µmho/cm
Temperature	Field	0.1	°C
Acidity, Total as CaCO <sub>3</sub>	SM 2310B	5	mg/L
<b>General Chemistry</b>			
Chloride	EPA 300.0	1	mg/L
Fluoride	EPA 300.0	0.5	mg/L
Sulfate	EPA 300.0	3	mg/L
<b>Nutrients</b>			
Nitrate+Nitrite as N	EPA 300.0	1.1	mg/L
Phosphorous, Total	SM 4500 PE	1.5	mg/L

**Notes:**

<sup>1</sup> – List applies to samples collected if pH < 5. Analysis conducted by IAS.

**Abbreviations:**

SU = Standard Units

µmho/cm = micro mhos per centimeter

°C = degrees Centigrade

mg/L = milligrams per liter



Table 2-5: PAP Area Expanded Analyte List <sup>1</sup>

Analyte	Method	Reporting Limit (RL)	Units
<b>Field Parameters</b>			
pH	Field	±0.1	SU
Specific Conductance	Field	5	µmho/cm
Temperature	Field	0.1	°C
<b>General Chemistry</b>			
Acidity, Total as CaCO <sub>3</sub>	SM 2310B	5	mg/L
Total Dissolved Solids	SM 2540C	--	mg/L
Chloride	EPA 300.0	1	mg/L
Fluoride	EPA 300.0	0.5	mg/L
Sulfate	EPA 300.0	3	mg/L
<b>Nutrients</b>			
Nitrate+Nitrite as N	EPA 300.0	1.1	mg/L
Phosphorous, Total	SM 4500 PE	1.5	mg/L
<b>Metals</b>			
Arsenic	EPA 200.8	0.001	mg/L
Barium	EPA 200.8	--	mg/L
Cadmium	EPA 200.8	0.001	mg/L
Calcium	EPA 200.7	0.01	mg/L
Chromium	EPA 200.8	0.001	mg/L
Magnesium	EPA 200.8	0.001	mg/L
Manganese	EPA 200.8	0.001	mg/L
Nickel	EPA 200.8	0.001	mg/L
Potassium	EPA 200.8	0.01	mg/L
Sodium	EPA 200.8	0.01	mg/L
Silver	EPA 200.8	0.001	mg/L
Uranium	EPA 200.8	0.001	mg/L
Vanadium	EPA 200.7	0.001	mg/L
Zinc	EPA 200.8	0.001	mg/L

Notes:

Analyte	Method	Reporting Limit (RL)	Units
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<sup>1</sup> – List applies to samples collected if pH < 4. Analysis conducted by IAS.

**Abbreviations:**

SU = Standard Units

μmho/cm = micro mhos per centimeter

°C = degrees Centigrade

mg/L = milligrams per liter

**Table 2-6: TCLP Metals Analyte List <sup>1</sup>**

Analyte	Method	Reporting Limit (RL)	Hazardous Characteristic Limit	Units
TCLP Arsenic	1311/6020A	0.05	5.0	mg/L
TCLP Barium	1311/6020A	0.05	100	mg/L
TCLP Cadmium	1311/6020A	0.05	1.0	mg/L
TCLP Chromium	1311/6020A	0.05	5.0	mg/L
TCLP Lead	1311/6020A	0.05	5.0	mg/L
TCLP Mercury	1311/6020A	0.01	0.2	mg/L
TCLP Selenium	1311/6020A	0.05	1.0	mg/L
TCLP Silver	1311/6020A	0.05	5.0	mg/L

**Notes:**

<sup>1</sup> – List applies to samples collected if total metal analysis exceeds the hazardous characteristic limit . Analysis conducted by IAS.

**Abbreviations:**

mg/L = milligrams per liter

TCLP = Toxic Characteristic Leaching Procedure

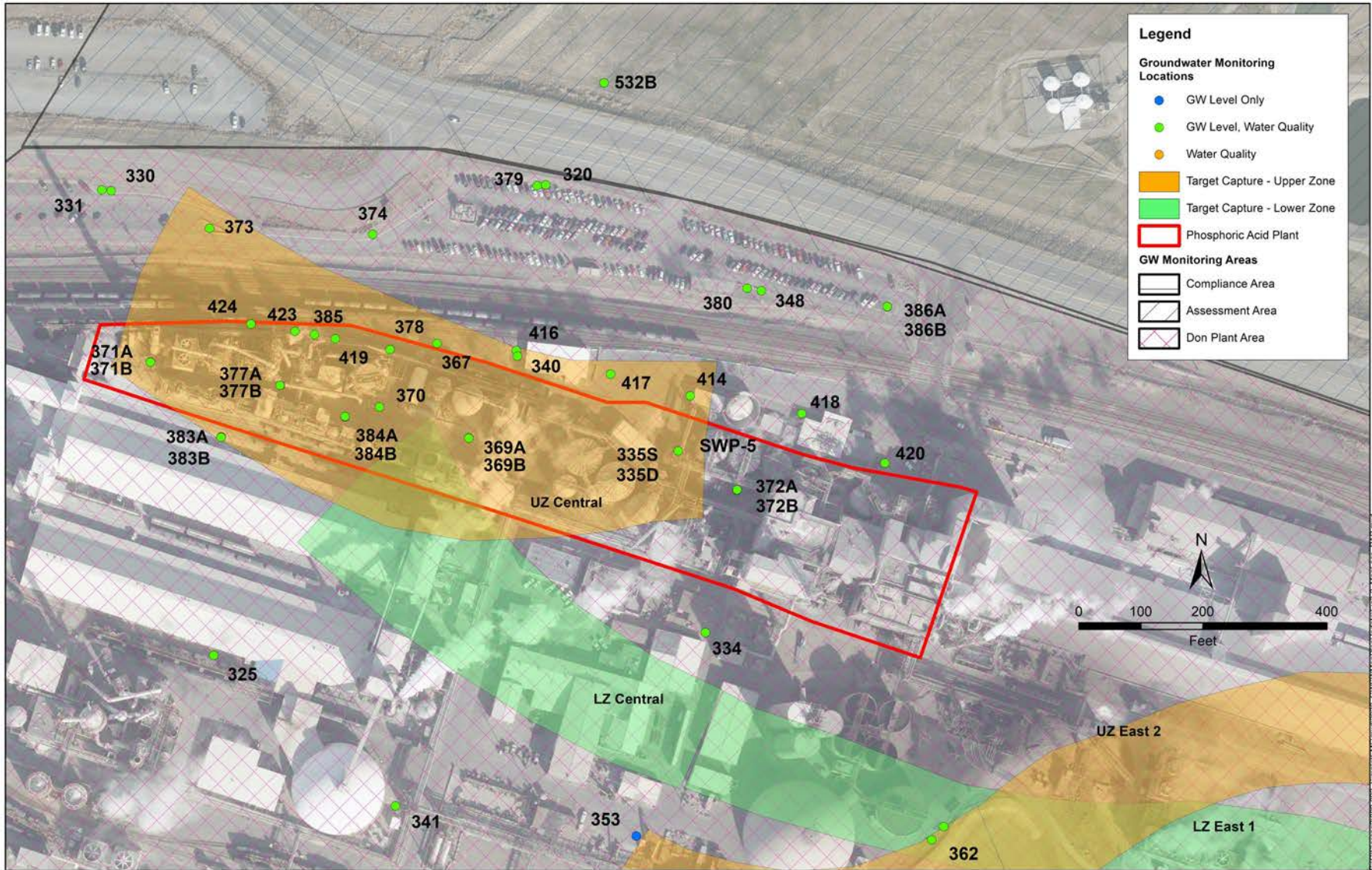


Figure 2-2: Monitoring Locations in the Phosphoric Acid Plant Area

### 2.1.3 Demonstrating Hydraulic Control in the Target Capture Zones

The groundwater extraction system consists of a network of shallow and deep extraction wells located near the northern edge of the gypsum stack and shallow wells downgradient of the central plant area. Demonstrating hydraulic control in the Target Capture Zones will be performed according to EPA's *Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems* (EPA 2008) and requires specific analyses of data from monitoring and extraction wells located in and near the Target Capture Zones

- The monitoring and extraction wells in the vicinity of Target Capture Zones are listed in Table 2-7 and well locations are shown in Figure 2-3. All of these wells are located within the Don Plant Monitoring Area and the groundwater level and water quality data collected from each well is discussed in Section 2.1.1.

**Table 2-7: Locations of Extraction and Monitoring Wells near Target Capture Zones**

Monitoring Location	Hydro-stratigraphic Unit	Capture Zone	Pumping Well	Sampling Schedule	Monitoring Data	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
<b>Fence Line Zone</b>								
401	Upper Zone	Fence Line	Yes	Quarterly	GWL, WQ	4555.84	174.7	204.7
402	Upper Zone	Fence Line	Yes	Quarterly	GWL, WQ	4543.2	174.5	215
415	Upper/Lower Zone	Fence Line	Yes	Quarterly	GWL, WQ	4459.06	72.9	145.8
189	Upper Zone	Fence Line	No	Quarterly	GWL, WQ	4560.72	178	187.5
307	Upper Zone	Fence Line	No	Quarterly	GWL, WQ	4561.83	162	172
308	Upper Zone	Fence Line	No	Quarterly	GWL, WQ	4541.49	150.8	170.8
309	Lower Zone	Fence Line	No	Quarterly	GWL, WQ	4458.14	148	168
310	Upper Zone	Fence Line	No	Quarterly	GWL, WQ	4458.64	82	87
312	Upper Zone	Fence Line	No	SA (Q2, Q4)	GWL, WQ	4451.13	89	97.7
324	Upper Zone	Fence Line	No	SA (Q2, Q4)	GWL, WQ	4455.13	97.5	102.5
329	Lower Zone	Fence Line	No	SA (Q2, Q4)	GWL, WQ	4451.94	127.5	137.5
<b>Lower East 1 Zone</b>								
411	Lower Zone	Lower East 1	Yes	Quarterly	GWL, WQ	4458.3	115.5	155.5
412	Upper/Lower Zone	Lower East 1	Yes	Quarterly	GWL, WQ	4451.72	57.3	179.4
422	Upper/Lower Zone	Lower East 1	Yes	Quarterly	GWL, WQ	4456.88	65.35	206.05
326	Lower Zone	Lower East 1	No	Quarterly	GWL, WQ	4452.23	105	110
337	Lower Zone	Lower East 1	No	No Sampling	GWL	4455.33	117.6	157.6
344	Lower Zone	Lower East 1	No	No Sampling	GWL	4457.75	130.8	145.8

**Table 2-7: Locations of Extraction and Monitoring Wells near Target Capture Zones**

Monitoring Location	Hydro-stratigraphic Unit	Capture Zone	Pumping Well	Sampling Schedule	Monitoring Data	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
361AR	Lower Zone	Lower East 1	No	Quarterly	GWL, WQ	4452.42	100.2	110.2
361BR	Lower Zone	Lower East 1	No	No Sampling	GWL	4452.22	169.3	179.3
361CR	Lower Zone	Lower East 1	No	No Sampling	GWL	4452.19	224.5	234.5
361DR	Bedrock	Lower East 1	No	No Sampling	GWL	4452.18	264.6	274.6
410	Lower Zone	Lower East 1	No	No Sampling	GWL	4456.43	120	160
<b>Lower East 2 Zone</b>								
413	Upper/Lower Zone	Lower East 2	Yes	Quarterly	GWL, WQ	4447.46	53	134
421	Upper/Lower Zone	Lower East 2	Yes	Quarterly	GWL, WQ	4448.31	52.3	126
317	Lower Zone	Lower East 2	No	SA (Q2, Q4)	GWL, WQ	4445.62	109.7	129.7
363AR	Lower Zone	Lower East 2	No	Quarterly	GWL, WQ	4454.08	106	116
363BR	Lower Zone	Lower East 2	No	No Sampling	GWL	4454.08	136	146
363CR	Bedrock	Lower East 2	No	No Sampling	GWL	4454.08	173.9	183.9
364AR	Lower Zone	Lower East 2	No	Quarterly	GWL, WQ	4450.06	96.5	106.5
364BR	Lower Zone	Lower East 2	No	No Sampling	GWL	4450.06	126.6	136.6
364CR	Bedrock	Lower East 2	No	No Sampling	GWL	4450.06	155.7	160.7
366AR	Lower Zone	Lower East 2	No	SA (Q2, Q4)	GWL, WQ	4445.73	94.1	104.1
366BR	Lower Zone	Lower East 2	No	No Sampling	GWL	4445.73	118.9	123.9
366CR	Bedrock	Lower East 2	No	No Sampling	GWL	4445.73	143.1	153.1
368AR	Lower Zone	Lower East 2	No	No Sampling	GWL	4444.1	154.6	164.6
368BR	Bedrock	Lower East 2	No	No Sampling	GWL	4443.66	184.2	195.2

**Table 2-7: Locations of Extraction and Monitoring Wells near Target Capture Zones**

Monitoring Location	Hydro-stratigraphic Unit	Capture Zone	Pumping Well	Sampling Schedule	Monitoring Data	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
<b>Lower Central Zone</b>								
SWP-4	Lower Zone	Lower Central	Yes	Quarterly	WQ	4447.5	148.0	218.0
376A	Lower Zone	Lower Central	No	No Sampling	GWL	4450.58	105.31	107.8
376B	Lower Zone	Lower Central	No	SA (Q2, Q4)	GWL, WQ	4450.61	126.03	131.0
376C	Lower Zone	Lower Central	No	SA (Q2, Q4)	GWL, WQ	4450.61	156.42	161.4
<b>Upper Central Zone</b>								
414	Upper Zone	Upper Central	Yes	Quarterly	GWL, WQ	4447.49	60.5	70.5
416	Upper Zone	Upper Central	Yes	Quarterly	GWL, WQ	4444.27	56.3	71.3
419	Upper Zone	Upper Central	Yes	Quarterly	GWL, WQ	4445.93	60.3	85.3
423	Upper Zone	Upper Central	Yes	Quarterly	GWL, WQ	4446.35	60	95
335S	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4444.93	70	80
340	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4443.9	61	76
367	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4445.38	57.95	72.95
369A	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4446.24	53.9	63.9
369B	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4446.27	67.7	72.7
370	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4446.49	56	71
371A	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4447.71	59	73.8
371B	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4447.72	82	91.8
372A	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4444.96	56.5	71.5
372B	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4444.96	76.4	81.4



**Table 2-7: Locations of Extraction and Monitoring Wells near Target Capture Zones**

Monitoring Location	Hydro-stratigraphic Unit	Capture Zone	Pumping Well	Sampling Schedule	Monitoring Data	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
373	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4442.12	55	70
374	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4441.18	55.4	70.4
377A	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4447.10	60.2	70.2
377B	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4447.13	74.7	79.7
378	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4445.42	60	65
379	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4442.22	81.4	91.2
380	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4440.23	74.4	84.2
383A	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4447.42	60.2	75.2
383B	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4447.78	82.2	92.2
384A	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4447.02	58.1	68.1
384B	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4446.95	72.6	82.6
385	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4445.92	58.2	93.2
417	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4444.21	56.9	71.9
418	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4442.09	60	80
420	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4442.38	60	90
424	Upper Zone	Upper Central	No	Quarterly	GWL, WQ	4445.85	60	85
<b>Upper East 1 Zone</b>								
403	Upper Zone	Upper East 1	No	No Sampling	GWL	4474.75	68	88
404	Upper Zone	Upper East 1	No	Quarterly	GWL, WQ	4475.84	75	95
405	Upper Zone	Upper East 1	No	No Sampling	GWL	4468.54	65.5	85.5

**Table 2-7: Locations of Extraction and Monitoring Wells near Target Capture Zones**

Monitoring Location	Hydro-stratigraphic Unit	Capture Zone	Pumping Well	Sampling Schedule	Monitoring Data	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
412	Upper/Lower Zone	Upper East 1	Yes	Quarterly	GWL, WQ	4451.72	57.3	179.4
316	Upper Zone	Upper East 1	No	No Sampling	GWL	4462.91	82	87
354	Upper Zone	Upper East 1	No	SA (Q2, Q4)	GWL, WQ	4463.76	80	94.5
362	Upper Zone	Upper East 1	No	Quarterly	GWL, WQ	4451.78	64.63	74.63
<b>Upper East 2 Zone</b>								
406	Upper Zone	Upper East 2	Yes	Quarterly	GWL, WQ	4463.76	67	87
422	Upper/Lower Zone	Upper East 1	Yes	Quarterly	GWL, WQ	4456.88	65.35	206.05
338	Upper Zone	Upper East 2	No	Quarterly	GWL, WQ	4492.21	99.5	109
339	Upper Zone	Upper East 2	No	No Sampling	GWL	4456.86	56	76
357	Upper Zone	Upper East 2	No	SA (Q2, Q4)	GWL, WQ	4488.56	100	109.5
407	Upper Zone	Upper East 2	No	Quarterly	GWL, WQ	4474.78	76.5	96.5
408	Upper Zone	Upper East 2	No	No Sampling	GWL	4457.42	65.5	85.5
<b>Upper East 3 Zone</b>								
413	Upper/Lower Zone	Upper East 3	Yes	Quarterly	GWL, WQ	4447.46	53	134
421	Upper/Lower Zone	Upper East 3	Yes	Quarterly	GWL, WQ	4448.31	52.3	126
318	Upper Zone	Upper East 3	No	Quarterly	GWL, WQ	4448.99	60	80
328	Upper Zone	Upper East 3	No	Annual (Q2)	GWL, WQ	4414.35	45	55
332	Upper Zone	Upper East 3	No	Quarterly	GWL, WQ	4451.17	66.3	76.3
350	Upper Zone	Upper East 3	No	Quarterly	GWL, WQ	4441.48	77	81.5
365	Upper Zone	Upper East 3	No	Quarterly	GWL, WQ	4446.77	56.24	66.24

**Table 2-7: Locations of Extraction and Monitoring Wells near Target Capture Zones**

Monitoring Location	Hydro-stratigraphic Unit	Capture Zone	Pumping Well	Sampling Schedule	Monitoring Data	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
375	Upper Zone	Upper East 3	No	SA (Q2, Q4)	GWL, WQ	4447.33	57.78	67.78
409	Upper Zone	Upper East 3	Yes	No Sampling	GWL	4456.08	59.5	79.5

## Notes:

GWL = Groundwater level

WQ = Water quality sample

amsl = above mean sea level

bgs = below ground surface

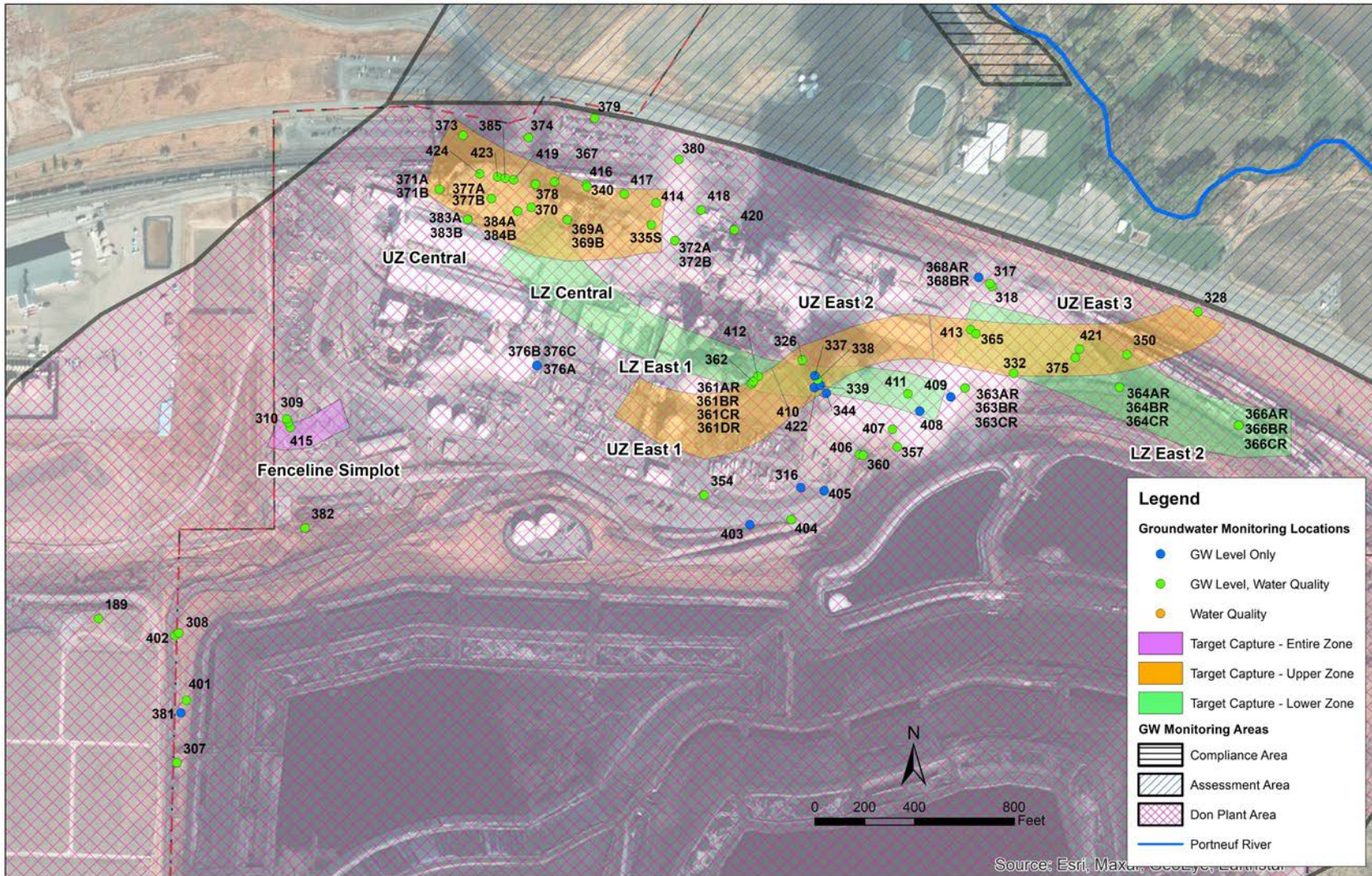


Figure 2-3: Monitoring Locations in Target Capture Zones

### 2.1.4 Evaluating Reduction in the Extent and Concentration of COCs in the Assessment Area

The wells in the Assessment Area that are monitored, the sampling frequency and the data that are collected are listed in Table 2-8. Monitoring well locations are shown in Figure 2-4. Samples of groundwater are collected and analyzed for the indicator analytes shown in Table 2-2. The following data are collected to evaluate the reduction of the extent and concentration of COCs in the Assessment Area:

- Quarterly groundwater level measurements in a network of monitoring wells in the Assessment Area.
- Quarterly surface water level measurements in the Portneuf River at the Highway 30 and Batiste Road bridges.
- Quarterly, semi-annual or annual groundwater sample collection and analysis from a network of monitoring wells in the Assessment Area.
- Quarterly water sample collection and analysis from Batiste and Batiste Road springs.

**Table 2-8: Monitoring Locations, Assessment Area.**

Monitoring Location	Hydro-stratigraphic Unit	Sampling Schedule	Monitoring Data	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
503	Upper Zone	SA (Q2, Q4)	GWL, WQ	4400.25	39.9	49.5
504	Lower Zone	Annual (Q2)	GWL, WQ	4394.99	153.8	163.4
505	Upper Zone	Annual (Q2)	GWL, WQ	4395.71	30.3	39.9
506	Upper Zone	No Sampling	GWL	4402.43	77.2	97.2
507	Upper Zone	No Sampling	GWL	4402.48	25	35
508	Lower Zone	No Sampling	GWL	4392.88	98.7	108.7
509	Upper Zone	No Sampling	GWL	4392.32	69.2	79.2
509A	Upper Zone	No Sampling	GWL	4392.18	10.5	25
510	Lower Zone	No Sampling	GWL	4399.8	99.3	109.3
511	Upper Zone	No Sampling	GWL	4399.67	60	70
511A	Upper Zone	No Sampling	GWL	4399.67	10.5	25
512	Lower Zone	No Sampling	GWL	4414.64	71.7	81.3
513	Upper Zone	No Sampling	GWL	4414.91	25.3	35.3
518	Upper Zone	No Sampling	GWL	4417.15	40.3	50.3

**Table 2-8: Monitoring Locations, Assessment Area.**

Monitoring Location	Hydro-stratigraphic Unit	Sampling Schedule	Monitoring Data	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
519	Lower Zone	Annual (Q2)	GWL, WQ	4399.54	85.3	105.3
520	Upper Zone	No Sampling	GWL	4398.8	26.2	36.2
524	Lower Zone	SA (Q2, Q4)	GWL, WQ	4399.92	48.5	58.5
525	Upper Zone	Quarterly	GWL, WQ	4399.61	17.8	27.8
526	Lower Zone	SA (Q2, Q4)	GWL, WQ	4429.19	104.58	124.58
527	Upper Zone	SA (Q2, Q4)	GWL, WQ	4428.85	40.08	60.08
528AR	Upper Zone	SA (Q2, Q4)	GWL, WQ	4416.99	59.9	69.9
528BR	Lower Zone	Annual (Q2)	GWL, WQ	4416.94	90.2	100.2
528CR	Lower Zone	No Sampling	GWL	4416.98	120.8	130.8
528DR	Lower Zone	No Sampling	GWL	4417.13	185.8	195.8
529AR	Upper Zone	SA (Q2, Q4)	GWL, WQ	4414.53	26.1	36.1
529BR	Upper Zone	SA (Q2, Q4)	GWL, WQ	4414.53	55.1	65.1
529CR	Lower Zone	No Sampling	GWL	4414.53	75.1	85.1
529DR	Lower Zone	No Sampling	GWL	4414.59	110.4	120.4
530A	Upper Zone	SA (Q2, Q4)	GWL, WQ	4417.5	27.3	42.3
530B	Upper Zone	SA (Q2, Q4)	GWL, WQ	4417.46	62.1	72.1
530C	Lower Zone	Annual (Q2)	GWL, WQ	4417.49	87.1	97.1
531A	Upper Zone	Quarterly	GWL, WQ	4422.38	29.9	44.9
531B	Upper Zone	Quarterly	GWL, WQ	4422.34	62.4	72.4
531C	Lower Zone	Annual (Q2)	GWL, WQ	4422.37	87.1	97.1
532A	Upper Zone	Quarterly	GWL, WQ	4431.78	39.4	54.4
532B	Upper Zone	Quarterly	GWL, WQ	4431.78	66.9	76.9
532C	Lower Zone	Annual (Q2)	GWL, WQ	4431.81	86.9	96.9
533A	Upper Zone	Quarterly	GWL, WQ	4416.58	24.8	39.8
533B	Upper Zone	Quarterly	GWL, WQ	4416.59	72.1	82.1
533C	Lower Zone	Annual (Q2)	GWL, WQ	4416.57	97.1	107.1
534A	Upper Zone	SA (Q2, Q4)	GWL, WQ	4391.63	5.2	15.2
534B	Upper Zone	SA (Q2, Q4)	GWL, WQ	4391.63	27.1	37.1
535A	Upper Zone	Quarterly	GWL, WQ	4440.99	54.6	69.6

**Table 2-8: Monitoring Locations, Assessment Area.**

Monitoring Location	Hydro-stratigraphic Unit	Sampling Schedule	Monitoring Data	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
535B	Upper Zone	Quarterly	GWL, WQ	4440.96	74.1	84.1
535C	Lower Zone	Annual (Q2)	GWL, WQ	4440.98	96.7	106.7
536A	Upper Zone	Quarterly	GWL, WQ	4442.16	48.9	63.9
536B	Upper Zone	Quarterly	GWL, WQ	4442.2	72.6	82.6
536C	Lower Zone	Annual (Q2)	GWL, WQ	4442.21	97.5	107.5
537A	Upper Zone	Quarterly	GWL, WQ	4393.38	16.6	26.6
537B	Upper Zone	Annual (Q2)	GWL, WQ	4393.39	67.3	77.3
538A	Upper Zone	Quarterly	GWL, WQ	4397.6	32.3	42.3
538B	Upper Zone	Annual (Q2)	GWL, WQ	4397.57	67.2	77.2
539A	Upper Zone	Quarterly	GWL, WQ	4397.24	17.4	27.4
539B	Upper Zone	SA (Q2, Q4)	GWL, WQ	4397.22	57.5	67.5
539C	Upper Zone	Annual (Q2)	GWL, WQ	4397.24	77.4	87.4
540A	Upper Zone	Quarterly	GWL, WQ	4418.95	27.0	37.0
540B	Upper Zone	Quarterly	GWL, WQ	4418.94	56.9	66.9
540C	Lower Zone	Annual (Q2)	GWL, WQ	4418.93	96.8	106.8
541A	Upper Zone	Quarterly	GWL, WQ	4405.43	16.9	26.9
541B	Upper Zone	No Sampling	GWL	4405.41	45.3	55.3
630	Upper Zone	No Sampling	GWL	4449.48	45.5	60.5
640	Upper Zone	No Sampling	GWL	4425.65	31.5	46.5
650	Upper Zone	No Sampling	GWL	4416.39	19.5	34.5
TW-11S	Upper Zone	Quarterly	GWL, WQ	4426.18	48	58
TW-12S	Upper Zone	Quarterly	GWL, WQ	4436.26	54	62
Portneuf River at Batiste Road (PBATR)	River	No Sampling	SWL	Surface Water Location		
Portneuf River at Hwy 30 (PTR30)	River	No Sampling	SWL	Surface Water Location		
Batiste Spring (BTS)	Spring	Quarterly	WQ	Surface Water Location		

**Table 2-8: Monitoring Locations, Assessment Area.**

Monitoring Location	Hydro-stratigraphic Unit	Sampling Schedule	Monitoring Data	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
Spring at Batiste Road (BRS)	Spring	Quarterly	WQ	Surface Water Location		

## Notes:

GWL = Groundwater level

SWL = Surface Water level

WQ = Water quality sample



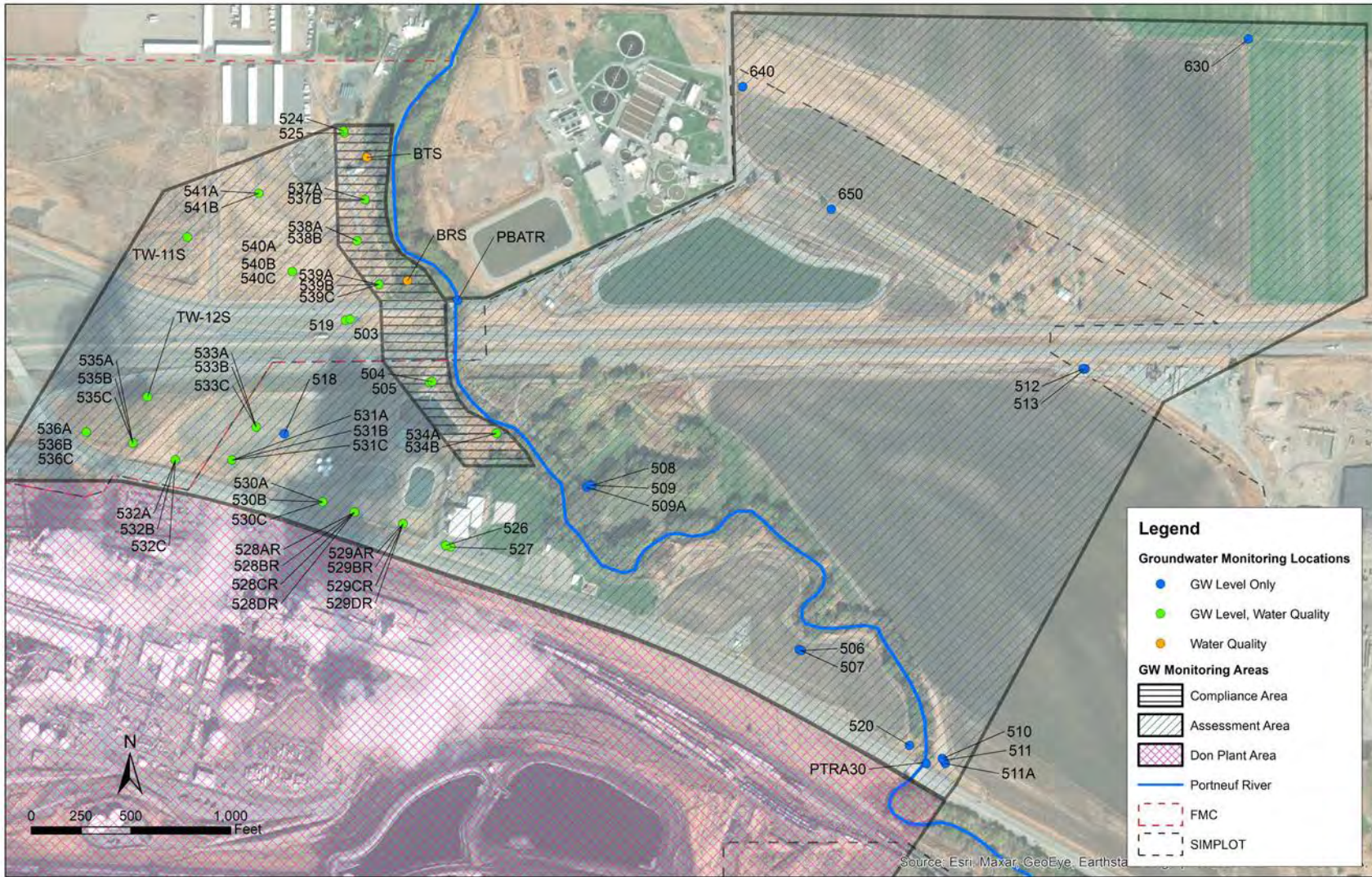


Figure 2-4: Monitoring Locations in the Assessment Area

### 2.1.5 Evaluate Migration of COCs into the Off-Plant Area

To demonstrate that groundwater migration into the Off-Plant Area is not occurring at concentrations above applicable MCLs and RBCs, the mean concentration of the most recent data (requiring at least 8 sample results) in groundwater will be calculated and compared to the standard on a well-by-well basis for each well in the Compliance Area. A confidence interval on the mean will be used to evaluate whether the mean is above or below the groundwater protection standard (GWPS) similar to that performed for RCRA facilities. For example, in corrective action monitoring at RCRA facilities, where actions are driving concentrations lower in an effort to meet the GWPS, the entire confidence interval must be below the GWPS to provide statistically significant evidence that the mean is below the GWPS. In RCRA compliance monitoring, where an unaffected location is being evaluated for compliance with a GWPS, the entire confidence interval must be above the GWPS to provide statistically significant evidence that the mean is above the GWPS.

The wells and springs in the Compliance Area that are monitored, the sampling frequency and the data that are collected are listed in Table 2-9. Monitoring well and spring locations are shown in Figure 2-5. Samples of groundwater are collected and analyzed for the list of expanded analytes shown in Table 2-10. The following data are collected specifically to evaluate the extent and concentration of COCs in the Compliance Area:

- Quarterly groundwater level measurements at monitoring wells in the Compliance Area.
- Quarterly or semi-annual groundwater sample collection and analysis from monitoring wells and springs in the Compliance Area.

**Table 2-9: Groundwater Monitoring Locations, Compliance Area.**

Monitoring Location	Hydro-stratigraphic Unit	Monitoring Schedule	Monitoring Data	Top of Casing Elevation (feet amsl)	Depth to Top of Screen (feet bgs)	Depth to Bottom of Screen (feet bgs)
504	Lower Zone	Annual (Q2)	GWL, WQ	4394.99	153.8	163.4
505	Upper Zone	Annual (Q2)	GWL, WQ	4395.71	30.3	39.9
524	Lower Zone	SA (Q2, Q4)	GWL, WQ	4399.92	48.5	58.5
525	Upper Zone	Quarterly	GWL, WQ	4399.61	17.8	27.8
534A	Upper Zone	SA (Q2, Q4)	GWL, WQ	4391.63	5.2	15.2
534B	Upper Zone	SA (Q2, Q4)	GWL, WQ	4391.63	27.1	37.1
537A	Upper Zone	Quarterly	GWL, WQ	4393.38	16.6	26.6
537B	Upper Zone	Annual (Q2)	GWL, WQ	4393.39	67.3	77.3
538A	Upper Zone	Quarterly	GWL, WQ	4397.6	32.3	42.3
538B	Upper Zone	Annual (Q2)	GWL, WQ	4397.57	67.2	77.2
539A	Upper Zone	Quarterly	GWL, WQ	4397.24	17.4	27.4
539B	Upper Zone	SA (Q2, Q4)	GWL, WQ	4397.22	57.5	67.5

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539C	Upper Zone	Annual (Q2)	GWL, WQ	4397.24	77.4	87.4
Spring at Batiste Road (BRS)	Spring	Quarterly	WQ	Surface Water Location		
Batiste Spring (BTS)	Spring	Quarterly	WQ	Surface Water Location		

Notes:

GWL = Groundwater level

WQ = Water quality sample



Figure 2-5: Monitoring Locations in the Compliance Area

**Table 2-10: Expanded Analyte List**

Analyte	Method	Reporting Limit (RL)	Units
<b>Field Parameters</b>			
Oxidation Reduction Potential	Field Meter	1	mV
Oxygen, Dissolved	Field Meter	0.1	mg/L
pH	Field Meter	±0.1	SU
Specific Conductance	Field Meter	5	µmho/cm
Temperature	Field Meter	0.1	°C
Turbidity	Field Meter	±0.1	NTU
<b>General Chemistry</b>			
Alkalinity, Total as CaCO <sub>3</sub>	SM 2320B	1	mg/L
Chloride	EPA 300.0	2	mg/L
Fluoride	EPA 300.0	0.1	mg/L
Hardness	SM 2340B	1.07	mg/L
Sulfate	EPA 300.0	0.3	mg/L
TDS	SM 2540C	10	mg/L
<b>Metals</b>			
Antimony	EPA 200.8	0.003	mg/L
Arsenic	EPA 200.8	0.003	mg/L
Beryllium	EPA 200.7	0.002	mg/L
Boron	EPA 200.7	0.04	mg/L
Cadmium	EPA 200.8	0.0002	mg/L
Calcium	EPA 200.7	0.1	mg/L
Chromium	EPA 200.7	0.006	mg/L
Magnesium	EPA 200.7	0.2	mg/L
Manganese	EPA 200.7	0.004	mg/L
Mercury	EPA 245.1	0.0002	mg/L
Nickel	EPA 200.7	0.01	mg/L
Potassium	EPA 200.7	0.5	mg/L
Selenium	EPA 200.8	0.003	mg/L
Sodium	EPA 200.7	0.5	mg/L
Thallium	EPA 200.8	0.001	mg/L

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Analyte	Method	Reporting Limit (RL)	Units
Vanadium	EPA 200.7	0.005	mg/L
Uranium	EPA 200.8	0.001	mg/L
Zinc	EPA 200.8	0.005	mg/L
<b>Nutrients</b>			
Nitrite+Nitrate as N	EPA 353.2	0.05	mg/L
Phosphorus, Total	SM 4500-PE	0.01	mg/L
<b>Radionuclides</b>			
Radium 226 <sup>1</sup>	EPA 903	0.1	pCi/L

## Notes:

<sup>1</sup> – Analysis performed once every 5 years beginning in the second quarter of 2019.

mV - millivolts

SU - Standard Units

µmho/cm - micro mhos per centimeter

°C - degrees Centigrade

mg/L - milligrams per liter

## 2.2 Surface Water Monitoring Program

### 2.2.1 Surface Water Monitoring Objectives

As specified in the VCO/CA, the objective of the surface water monitoring program is to collect sufficient data of adequate quality to verify that remedial actions successfully reduce Don Plant impacts to surface water in the Portneuf River. The monitoring strategy will also provide a mechanism to identify when additional contingency actions are required and shall measure progress toward achieving final surface water RBCs as measured at the locations approved by EPA pursuant to Section III.D.7.d of the Consent Decree SOW.

### 2.2.2 Monitoring Locations and Analytical Parameters

The VCO/CA sets out the required monitoring locations (Figure 2-6), as follows:

- IDEQ (accompanied by a Simplot representative when possible) will collect samples at the POC (Siphon Road) to determine the concentration of total phosphorus in the Portneuf River on a monthly basis. The calculation basis for compliance shall be the annual median of monthly values.
- Simplot or IDEQ will perform monthly sampling at the following two locations:
  - Batiste Road;

- A location approximately 300-400 meters north of Batiste Road at site T-2B

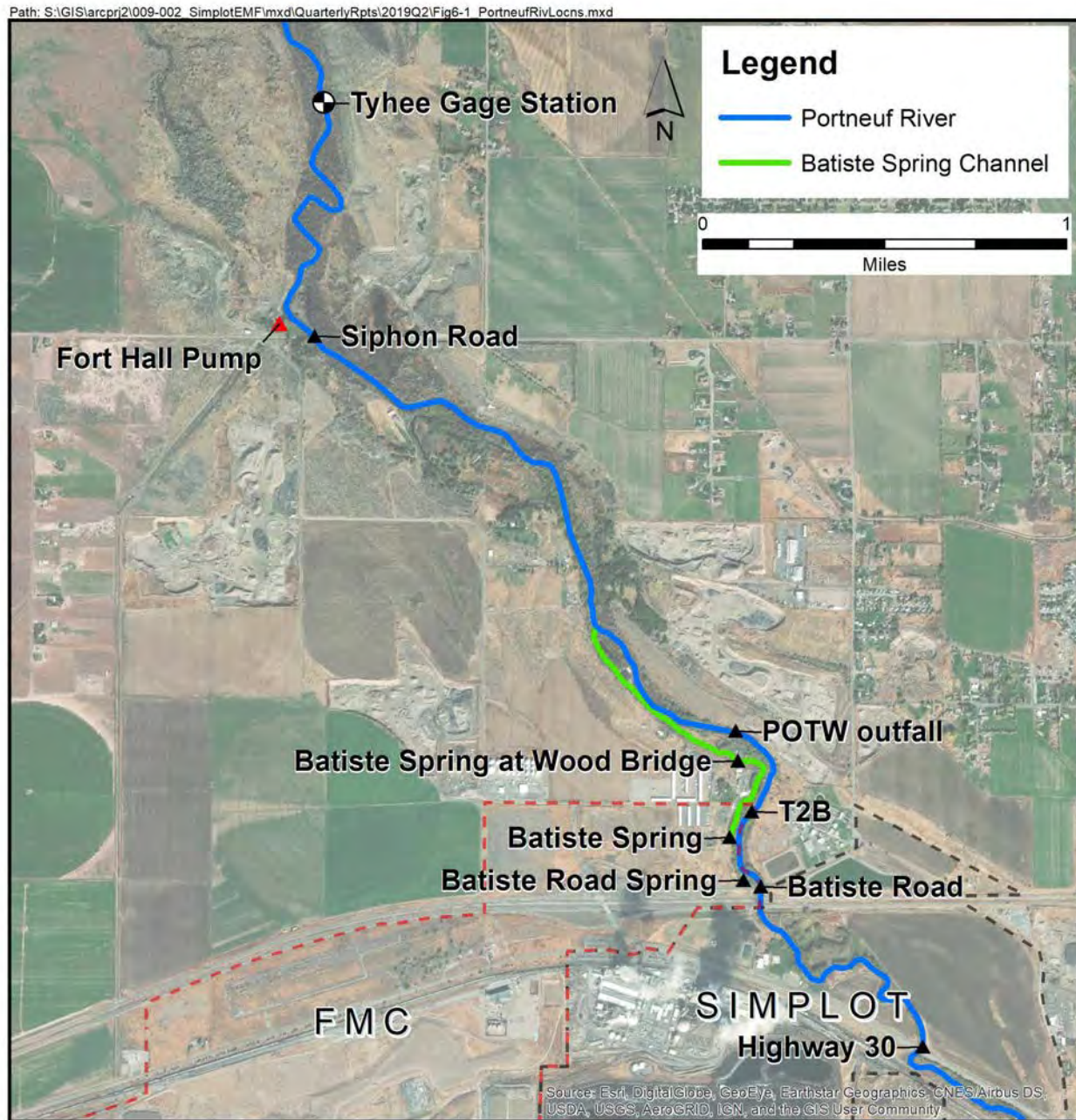


Figure 2-6: Portneuf River Sampling Locations



Surface water samples are analyzed for the parameters shown in Table 2-11.

**Table 2-11: Analyte List for Surface Water Samples <sup>1</sup>**

Analyte	Method	Detection Limit	Units
Oxygen, Dissolved	Field Meter	1	mV
pH	Field Meter	±0.1	SU
Specific Conductivity	Field Meter	5	µmho/cm
Temperature	Field Meter	0.1	°C
Chloride	EPA 300.0	1	mg/L
Sulfate	EPA 300.0	1	mg/L
Total Dissolved Solids	SM 2540C	10	mg/L
Nitrate+Nitrite as N	EPA 353.2	0.05	mg/L
Phosphorus, Total	SM 4500-PE	0.004	mg/L
Dissolved Orthophosphate <sup>a</sup>	EPA 365.2	0.004	mg/L

Notes:

<sup>1</sup> – See Table 8 in the Portneuf River QAPP

mV = millivolts

SU = Standard Units

µmho/cm = micromhos per centimeter

°C = degrees Centigrade

mg/L = milligrams per liter

<sup>a</sup> Measured by IDEQ

## 2.3 Surface Water Data Analysis

The goals of the data analysis are to:

- Compare the total phosphorus concentrations with the TMDL goal at Siphon Road.
- Assess the performance of remedial actions in reducing the load of total phosphorus to the river from input of EMF groundwater.

For the first goal, the monthly total phosphorus concentrations measured by IDEQ for the calendar year are tabulated and the median of the results calculated for direct comparison to the concentration targets. For the second goal a mass loading model is used to assess the input of phosphorus from EMF groundwater and its effect on concentrations in the river (see Figure 2-7).

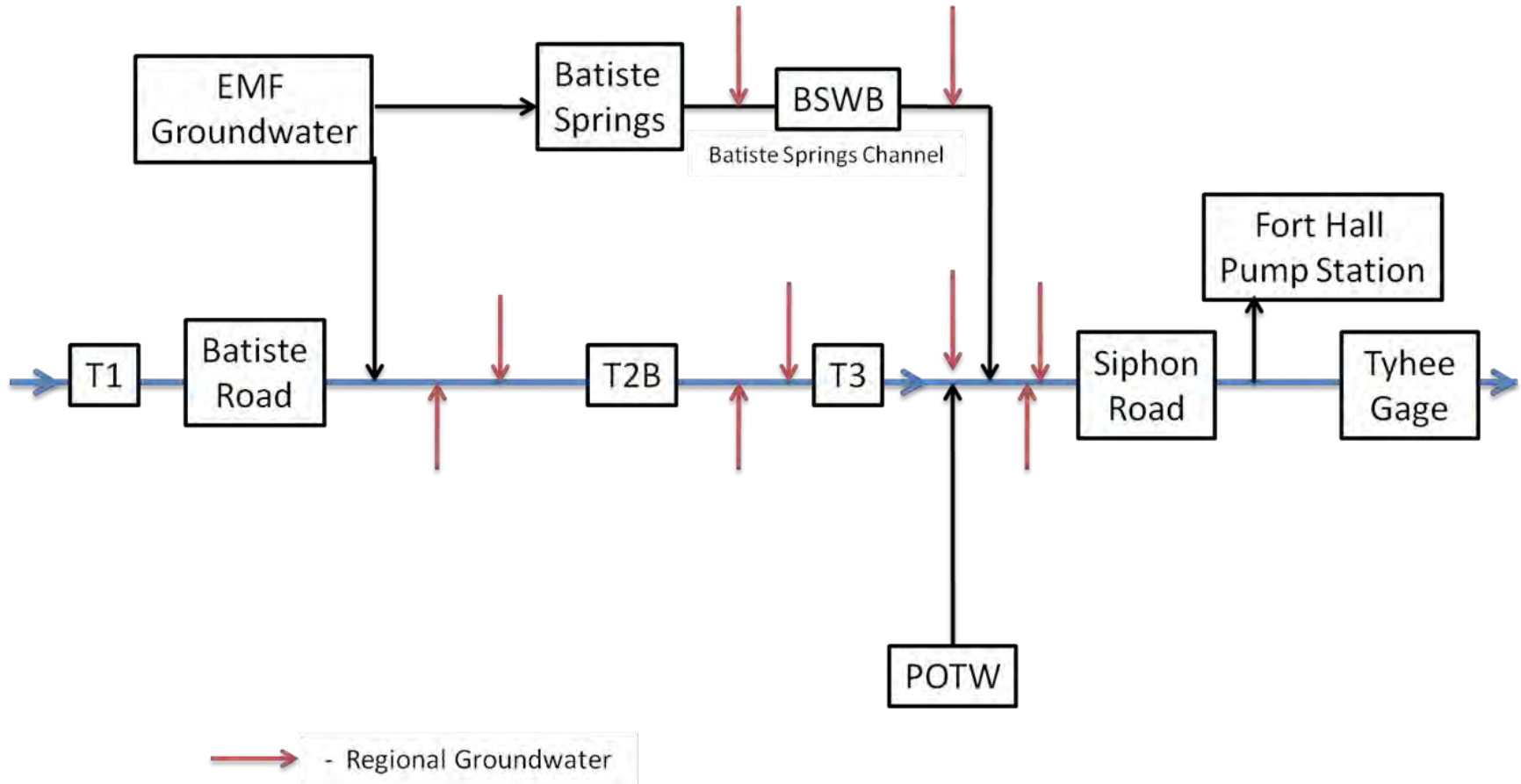


Figure 2-7: Mass Loading Model of the Lower Portneuf River

### 3.0 Reporting

Reporting of the groundwater and surface water monitoring data and associated analyses and recommendations is as follows:

#### Monthly Reporting

Data collected as part of the additional groundwater monitoring requirements in the PAP Area will be reported by the end of the month following of the completion of the data collection program for that month (e.g., by August 31 for July).

#### Quarterly Reporting

Data from each quarterly monitoring event will be reported by the end of the following quarter (e.g., by June 30 for the first quarter).

#### Annual Reporting

Annual reports will be prepared to provide additional information and data analysis. The reports will be provided by March 31 of the following year.

## 4.0 References

- Bechtel 1996, Remedial Investigation Report for the Eastern Michaud Flats Superfund Site, Prepared for FMC Corporation and J.R. Simplot Company, August 1996.
- United States Environmental Protection Agency (EPA) 1998. Record of Decision for the Eastern Michaud Flats Superfund Site. June 8, 1998.
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- EPA 2008. A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems. EPA/600/R-08/003. January 2008.
- EPA 2010. Interim Amendment to the Record of Decision for the EMF Superfund Site, Simplot Plant Operable Unit, Pocatello, Idaho. January 2010.
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- Formation Environmental LLC 2021. Revised Draft Groundwater and Surface Water Monitoring Plan Revision 2, Simplot Operable Unit, Eastern Michaud Flats Superfund Site, Pocatello, Idaho. Prepared for J.R. Simplot Company. January 2021.
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- Jacobson N.D. 1984. Hydrogeology of Eastern Michaud Flats, Fort Hall Indian Reservation, Idaho. U.S. Geological Survey Water-Resources Investigations Report 84-4201. Boise, Idaho.
- Othberg, K.L., 2002. Surficial Geologic Map of the Michaud and Pocatello North Quadrangles, Bannock and Power Counties, Idaho. Idaho Geological Survey, Surficial Geologic Map 14.
- Spinazola, J.M. and B.D. Higgs 1998. Water Resources of Bannock Creek Basin, Southeastern Idaho. U.S. Geological Survey Water-Resources Investigations Report 97-4231. Boise, Idaho.
- Trimble, G.E., 1976. Geology of the Michaud and Pocatello quadrangles, Bannock and Power Counties, Idaho, USGS Bulletin 1400.
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**APPENDIX 1.B****PHOSPHOGYPSUM STACK SYSTEM CONSTRUCTION AND OPERATIONAL REQUIREMENTS****I. Phosphogypsum Stack System general criteria<sup>1</sup>**

- 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.
1. 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 Simplot personnel operating the Phosphogypsum Stack System. Required components of an operation plan are found in Section VIII.E.
  3. Groundwater monitoring. The Facility shall perform Groundwater monitoring and reporting as described in Appendix 1.A (Groundwater Requirements).
  4. Surface Water<sup>2</sup> management. Phosphogypsum Stack Systems shall be operated for the collection, control, recycling and/or treatment of Run-off<sup>3</sup> from the systems as necessary to meet the applicable water quality standards of the State of Idaho and the

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

<sup>2</sup> See definition of "Surface Waters of the State" in Appendix 9.

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

applicable standards of the 2001 Remedial Design/Remedial Action Consent Decree with J.R. Simplot Co. (2001 RD/RA CD), and the 2010 Interim Record of Decision Amendment (2010 IRODA)

5. Leachate management. Any Leachate emanating from a Phosphogypsum Stack System shall be routed to a Decant Pond<sup>4</sup> 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 Idaho.
  
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 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. A detailed description of Process Wastewater management 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;
  
  - b. A detailed description of the required procedures for the 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;
  
  - c. Identification of all machinery, equipment, and materials necessary to implement the plan as well as actions that shall

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<sup>4</sup> 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. <sup>5</sup> The face of the Dike in contact with the impounded liquids.

be taken to assure the availability of these items during the planning period;

- 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 Idaho 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:

- 1. 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 Idaho; or
- 2. Engineered or retrofitted, to be in compliance with the following:
  - a. Cross section design
    - i. Both of the Inside<sup>5</sup> and Outside<sup>6</sup> 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

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<sup>5</sup> The face of the Dike in contact with the impounded liquids.

<sup>6</sup> The face of the Dike not in contact with the impounded liquids.

- (b) Clay core or other impermeable core material
  - (c) Blanket drain
  - (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. Stability analysis. 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. Design safety factors. 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 de-servicing, 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 Watershed<sup>7</sup> 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

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<sup>7</sup> "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.

snowfall, precipitation and other meteorological data from a long-term historical record or a 100-year, twenty-four (24) hour precipitation value,<sup>8</sup> 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. Site investigation. 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 in-place 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.

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<sup>8</sup> See City of Chubbuck and Pocatello. 2015. Portneuf Valley Stormwater Design Manual. Table 4-1 (page 4-3) has a 24-hour, 100-year storm event value of 1.61 inches for the Pocatello Airport.

Tests on embankment soils shall be performed on samples remolded to the densities and moisture contents to be used in construction.

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. Freeboard provisions. 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. Design factors of safety and slope stability of Perimeter Dikes
    - a. Stability analysis. 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. Design safety factors for Perimeter Dikes. 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. Site preparation. 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. Material to be used. 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.
  
  - 2. 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
  3. 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 areas<sup>9</sup> 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.<sup>10</sup>
- 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**

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

<sup>10</sup> 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.

- A. Minimum design standards. The requirements of this Section are the minimum standards for constructing the following Components of Phosphogypsum Stack Systems after the Effective Date:
1. New Phosphogypsum Stacks;
  2. New Decant Ponds;
  3. New Auxiliary Holding/Overflow Ponds (AHP); and
  4. New Process Wastewater conveyances.
  5. New cooling ponds
- B. Safety factor. 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. Run-on control. Simplot shall install and maintain a Run-on<sup>11</sup> management system capable of preventing the greater of flow during peak discharge calculated using precipitation data from a twenty-four (24) hour, 24-year Rainfall Event<sup>12</sup> 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.
- D. Run-off control. 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, 24-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. Liner and Leachate control systems. 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:

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

<sup>12</sup> See City of Chubbuck and Pocatello. 2015. Portneuf Valley Stormwater Design Manual. Table 4-1 (page 4-3) has a 24-hour, 24-year storm event value of 1.37 inches for the Pocatello Airport.



- a. Constructed of materials that have appropriate physical, chemical, and mechanical properties to prevent failure due to:
  - 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
  - v. 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.
- b. 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;
- c. 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 (Alternative Liner Demonstration).
- 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. Soil. A layer of compacted soil at least eighteen (18) inches thick, placed below the Geomembrane, with a maximum hydraulic conductivity of  $1 \times 10^{-7}$  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  $1 \times 10^{-4}$  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 (Alternative Liner Demonstration).
- 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, in consultation with the State of Idaho, 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, in consultation with the State of Idaho, 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 (Alternative Liner Demonstration) 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, in consultation with the State of Idaho, 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 (Alternative Liner Demonstration) 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 Idaho and/or EPA upon request.

6. Exceptions. 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**

- A. Construction quality assurance/quality control plan. Liner systems shall 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;

4. 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. Soil Liner construction quality assurance/quality control plan. 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. Parenthetical 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.
- b. 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 ninety-eight 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:
- i. 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:
- i. 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. Field testing during Liner system installation. 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. 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. Laboratory testing during Liner installation. The following laboratory tests shall be performed during Liner installation at a minimum test frequency specified as described below and in the approved quality assurance /quality control plan:
1. Percent fines (ASTM D-1140) of the Liner construction material; shall be determined at a minimum frequency of two (2) tests per acre 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 tests conducted in triaxial type permeameters (ASTM D-5084) using 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. 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

1. 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 that meets the Liner system construction requirements (Section VI.E.1 through 5).

I. Liquid containment and conveyance systems

1. 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.<sup>13</sup> 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:
1. 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.

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<sup>13</sup> 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.

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.
  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. Phosphogypsum Stack System operation plans. 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 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. 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 Portneuf Valley Stormwater Design Manual (table 4-1) as updated.<sup>14</sup>
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;
  - b. At the end of the snowy or rainy season, the calculated long-term or 100-year, twenty-four (24) hour precipitation event

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<sup>14</sup> Table 4-1 of this document has a 100-year, 24-hour precipitation value for the City of Pocatello Airport. See City of Chubbuck and Pocatello. 2015. Portneuf Valley Stormwater Design Manual. Table 4-1 (page 4-3) has a 24-hour, 100-year storm event value of 1.61 inches.



calculated (in inches) for the area where the Facility is located; or

- c. Water levels that exceed impoundment Maximum Design Levels<sup>15</sup> 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 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. 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;
    - b. 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

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<sup>15</sup> 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.

combination of such actions that will result in achievement of the water balance targets.

**IX. Contingency plans for operating Phosphogypsum Stack Systems**

- A. Contingency plan. 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 and the State upon request.
- B. Training. 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.

**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 Idaho DEQ. If only a portion of a Phosphogypsum Stack System (e.g., lower side slopes) has undergone permanent closure approved by Idaho 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. Applicability. The following requirements apply to a Phosphogypsum Stack, Phosphogypsum Stack System, or Component thereof.
1. Initial Closure Plan. 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).
  2. Updated Closure Plan. Any update to the Initial Closure Plan must include the following requirements:
    - a. Physical Configuration. 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.
    - b. Site-Specific Water Management Plan. 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.

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

### **III. Permanent Closure Requirements for Phosphogypsum Stacks/Stack Systems**

- A. Notification and Closure Application. 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 EPA and Idaho DEQ. 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 Idaho DEQ, as described below.
- B. Permanent Closure Plan. 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. General information report. This report must be submitted for approval to EPA and Idaho 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;
7. 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. Area information report. 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 Water<sup>1</sup> 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.

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<sup>1</sup> See definition of “Surface Waters of the State” in Appendix 9.

- E. Groundwater monitoring plan. The Groundwater monitoring plan and most recent report submitted to Idaho 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.
- G. Performance standards. 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;
    - b. 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. Closure Overview, Schedule and Environmental Considerations. 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 31 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. This is referenced in Appendix 8, Sections 2.4 Key Elements of Closure Design and 2.5 Phased Closure Construction Schedule of the General Closure Plan.

Phase 1 and 2– (Years 1 through 5)



- Pump process water collected in the decant ponds and return water pump station back to the top of the existing gypsum stack for water management and evaporation.
- 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 and designated on final closure design drawings to allow for the collection of drainage.
- Install perimeter seepage collection Toe Drains at designated areas 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.
- Construct an earthen containment dike for surface water detention pond that will be located on natural ground at the northeast corner of the gypsum stack storage for management of runoff from rainfall and snowmelt on closed portions of the gypsum stack side slopes.

#### Phases 3-6 – (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 two 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 completed 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 7 – (Years 16 through 50)

- 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. Closure design plan. 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  $1 \times 10^{-7}$  cm/sec; for lined Phosphogypsum Stacks, the barrier layer shall have a maximum permeability of  $1 \times 10^{-5}$  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 low-permeability 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 minimize 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:

- i. 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:
    - i. 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 Idaho or the remedial objectives set forth in the Remedial Design/Remedial Action Consent Decree with Defendant J.R. Simplot Company (2001) and any amendments. 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 Idaho. The stormwater control plan shall meet the requirements of the State of Idaho.
  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. Closure construction quality assurance plan. 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. Phosphogypsum Stack System Closure Operation Plan. 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. Certification by an Engineer. 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. Stack Closure inspections. 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. Final survey and record drawings. 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. Certification of closure construction completion. A certification of closure construction completion, signed, dated and sealed by a Third-Party Engineer shall be provided to EPA and Idaho 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. Use of closed Phosphogypsum Stack Systems. 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. Long-Term Care period. 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. Certification of Long-Term Care Completion. 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).

**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) An interim status report regarding resolution of the critical condition shall be submitted to EPA every thirty (30) days until the critical condition is resolved, unless waived by EPA. If the Critical Condition persists for longer than ninety (90) days, Simplot with explanation, may request approval of a revised schedule for submittal of the interim status reports. Approval of the request is within the sole discretion of the Agency.
- (3) Within seven (7) days of completion of the actions taken to resolve the reported critical condition, a Critical Condition Completion Report shall be submitted for review by EPA.
- (4) 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 downstream slope, at the slope Toe, or downstream from 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 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) An interim status report regarding resolution of the critical condition shall be submitted to EPA every thirty (30) days until the critical condition is resolved, unless waived by EPA. If the Critical Condition persists for longer than ninety (90) days, Simplot with explanation, may request approval of a revised schedule for submittal of the interim status reports. Approval of the request is within the sole discretion of the Agency.
- (3) Within seven (7) days of completion of the actions taken to resolve the reported critical condition, a Critical Condition Completion Report shall be submitted for review by EPA.
- (4) 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 Idaho 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.

**Appendix 1.E****Phosphogypsum Stack System Permanent Closure Application****PART I – INSTRUCTIONS**

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.C and in accordance with conditions set forth in the Consent Decree. The applicant shall complete Part II and submit this form, certified by the applicant and its Third-Party Engineer. This form should be typed or printed. If additional space is needed, separate, properly identified sheets of paper may be attached. All blanks shall be filled or modified N/A (not applicable).

In addition to the information listed on this form and otherwise required by the Consent Decree, including Appendix 1.C, the applicant shall submit all information necessary to evaluate the proposed closure plan to ensure the Phosphogypsum Stack System will pose no significant threat to public health or the environment. A minimum of four copies of this application (preferably in a large binder) shall be submitted to the EPA. Please complete applicable Sections of the application.

**PART II - GENERAL INFORMATION**

(1) Application for permanent closure:

Phosphogypsum Stack     Decant ponds or surge ponds     Other

(2) Facility name: \_\_\_\_\_

(3) Facility RCRA EPA ID No.: \_\_\_\_\_

(4) Facility location (main entrance): \_\_\_\_\_

(5) Location: Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

Section\_Township\_\_Range\_\_\_\_\_UTMs: Zone\_\_\_\_\_km E\_km N

(6) Applicant Name (Operating Authority): \_\_\_\_\_

Street Address &amp; P. O. Box: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ Zip: \_\_\_\_\_

Contact Person-Name \_\_\_\_\_ Phone: \_\_\_\_\_

Email: \_\_\_\_\_

(7) Authorized Agent/Consultant Name: \_\_\_\_\_

Street Address & P. O. Box: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ Zip: \_\_\_\_\_

Contact Person-Name \_\_\_\_\_ Phone: \_\_\_\_\_

Email: \_\_\_\_\_

(8) Land Owner  
(if different from applicant): \_\_\_\_\_

Address of Landowner:  
Street & P. O. Box: \_\_\_\_\_

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 8;
- (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

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

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

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

	Completeness Check	Binder Location
<b>(6) Closure design plan</b>	<input type="checkbox"/>	
(a) Phasing of site closure	<input type="checkbox"/>	
(b) Existing topography and proposed final grades	<input type="checkbox"/>	
(c) Final Cover installation plans	<input type="checkbox"/>	
(d) Type of Leachate control system proposed	<input type="checkbox"/>	
(e) Compliance with Groundwater protection requirements of the CERCLA 2002/2010 Consent Decree and/or as appropriate the Idaho Groundwater Rule (IDAPA 58.01.11)	<input type="checkbox"/>	
(f) Proposed method of stormwater control	<input type="checkbox"/>	
(g) Proposed method of access control	<input type="checkbox"/>	
(h) Proposed final use of Phosphogypsum Stack System property	<input type="checkbox"/>	
<b>(7) Closure construction quality assurance plan</b>	<input type="checkbox"/>	
(a) Listing of personnel involved in closure construction and quality assurance activities	<input type="checkbox"/>	
(b) Scope of work	<input type="checkbox"/>	
(c) Outline of construction activities	<input type="checkbox"/>	
(d) Quality assurance methods and procedures	<input type="checkbox"/>	
(e) Test results	<input type="checkbox"/>	
(f) Record drawings	<input type="checkbox"/>	



	Completeness Check	Binder Location
(8) Closure Operation Plan	<input type="checkbox"/>	_____
(a) Describe actions which will be taken to close the Phosphogypsum Stack System	<input type="checkbox"/>	_____
(b) Time schedule for completion of closure and long term care	<input type="checkbox"/>	_____
(c) Equipment and personnel needs to complete closure	<input type="checkbox"/>	_____
(d) Appropriate references to design closure plan	<input type="checkbox"/>	_____
(e) Proposed use of the system for water storage or water management	<input type="checkbox"/>	_____

(3) Engineer certification

**PART V - CERTIFICATION BY APPLICANT AND THIRD-PARTY ENGINEER**

(1) Applicant

The undersigned applicant or authorized representative<sup>1</sup> 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 this application is true, correct and complete to the best of his knowledge and belief.

Signature of Applicant or Authorized Representative

\_\_\_\_\_ By \_\_\_\_\_  
*Date* *Name*  
*Title*

(2) Professional Engineer registered in \_\_\_\_\_ or Public Officer as required in [State code].

This is to certify that the engineering features of this Facility's Permanent Phosphogypsum Stack System Closure Plan have been designed/examined by me and found to conform to engineering principles applicable to such facilities. In my

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

professional judgment, this Facility's Permanent Phosphogypsum Stack System Closure Plan, when properly executed, will comply with the requirements of Appendix 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.

\_\_\_\_\_ By \_\_\_\_\_  
*Date* *Name*  
*Title*

Mailing Address \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone Number  
(including area code): \_\_\_\_\_

State Registration Number: \_\_\_\_\_

(Please affix seal)

## Appendix 2

### Financial Assurance

NOTE - REDACTED FOR ASSERTED  
CONFIDENTIAL BUSINESS INFORMATION

## APPENDIX 2: FINANCIAL ASSURANCE

This Appendix sets forth the obligations of Defendant J.R. Simplot Company (Simplot) to secure and maintain Financial Assurance, as required under Paragraph 26 of the Consent Decree, including schedules and notice requirements. Submittals requiring EPA approval shall be submitted pursuant to Section V (Compliance Requirements), Paragraphs 35 - 39, and Section XV (Notices) of the Consent Decree. An EPA approval or determination shall be subject to dispute resolution pursuant to Section XI (Dispute Resolution) of the Consent Decree, including judicial review, unless this Appendix specifies otherwise. The standard of review regarding any EPA approval or determination under this Appendix (including requirements incorporated by reference) shall be governed by Paragraph 83(a) of the Consent Decree. If, in situations where judicial review is not precluded by this Appendix, Simplot seeks but does not prevail on judicial review of such EPA approval or determination, Simplot shall pay all costs incurred by the United States in connection with such judicial review, including attorneys' fees.

Any modification of a time period specified by this Appendix or its Attachments is a non-material modification for purposes of Section XVIII (Modification) of the Consent Decree and may be modified by written agreement of the Parties.

Under this Appendix, when required to provide an originally signed certification by the Chief Financial Officer ("CFO"), unless otherwise specified, another designated corporate officer may provide the signed certification if authority to sign has been assigned or delegated in accordance with corporate procedures and bylaws ("duly designated corporate officer"). Simplot shall use the form provided in Attachment A ("CFO Certification") of this Appendix for this certification.

### I. Definitions

Except as otherwise provided in this Appendix, definitions for the terms presented herein shall be incorporated from 40 C.F.R. § 264.141. Whenever the terms set forth below are used in this Appendix, the definitions set forth below shall apply. However, the Parties are not bound by these definitions in connection with any matter not relating to Financial Assurance under this Consent Decree.

"Anniversary Date" shall mean the annual anniversary of the date that Financial Assurance is provided unless otherwise stated in this Appendix.

"Closure Plan" shall mean the plan (including, as applicable, the Initial Phosphogypsum Stack System Closure Plan or Permanent Phosphogypsum Stack System Closure Plan) prepared for Stack Closure and Long-Term Care, and associated water treatment activities, in accordance with the requirements of Appendix 1.C of the Consent Decree.

"Cost Estimate" shall mean the estimate of the costs for Stack Closure and Long-Term Care at the Facility as set forth in Section II of this Appendix.

"Current Dollars" shall mean U.S. dollars in the year actually received or paid, unadjusted for price changes or inflation.

“Financial Mechanism” shall mean those mechanisms or instruments specified in this Appendix used to secure funding for an obligation under the Consent Decree.

“Long-Term Care” shall have the same meaning as set forth in Appendix 10 for those activities required pursuant to Appendix 1.C and for purposes of Appendix 2 shall: (1) include associated water treatment activities; and (2) be substituted for the term “post closure” in 40 C.F.R. Part 264, Subpart H.

“Related Party” or “Related Parties” shall have the same meaning as set forth in the Statement of Financial Accounting Standards No. 57, Appendix B (Glossary) (Financial Accounting Standards Board - Original Pronouncements, as amended) as that standard may hereafter be modified, which standard currently provides: “Affiliates of the enterprise; entities for which investments in their equity securities would, absent the election of the fair value option under FASB Statement No. 159, *The Fair Value Option for Financial Assets for Financial Assets and Financial Liabilities*, be required to be accounted for by the equity method by the enterprise; trusts for the benefit of employees, such as pension and profit-sharing trusts that are managed by or under the trusteeship of management; principal owners of the enterprise; its management; members of the immediate families of principal owners of the enterprise and its management; and other parties with which the enterprise may deal if one party controls or can significantly influence the management or operating policies of the other to an extent that one of the transacting parties might be prevented from fully pursuing its own separate interests. Another party also is a Related Party if it can significantly influence the management or operating policies of the transacting parties or if it has an ownership interest in one of the transacting parties and can significantly influence the other to an extent that one or more of the transacting parties might be prevented from fully pursuing its own separate interests.”

“Stack Closure” or “Stack System Closure” shall have the same meaning as set out in Appendix 10, for those activities required pursuant to Appendix 1.C and for purposes of Appendix 2 shall: (1) include associated water treatment activities; and (2) substitute for the term “closure” in cited requirements of 40 C.F.R. Part 264, Subpart H.

“Substantial Business Relationship” shall mean the extent of a business relationship necessary under applicable state law to make a guarantee contract issued incident to that relationship valid and enforceable. A “Substantial Business Relationship” must arise from a pattern of recent or ongoing business transactions, in addition to the guarantee itself, such that a currently existing business relationship between the guarantor and the owner or operator is demonstrated to the satisfaction of EPA.

“Third Party” shall mean a party that is not a Related Party nor a party with a Substantial Business Relationship to Simplot.

“Third-Party Mechanism” shall mean a trust fund, surety bond, letter of credit, or insurance as set forth in this Appendix.

“Trust Agreement” shall mean a signed document that establishes a trust fund. A trust fund is a mechanism in which legal title to property (e.g., cash, investment securities) is transferred from Simplot (the “Grantor”) to another party (the “Trustee”) who will hold and administer the property for the benefit of EPA (the “Beneficiary”).

## II. Cost Estimate

1. Simplot has provided, and EPA has accepted, its Cost Estimate in Appendix 8.
  - a. The Cost Estimate shall include a detailed written Cost Estimate for Stack Closure and Long-Term Care for the Facility, including but not limited to the cost of cover material, topsoil, seeding, fertilizing, mulching, labor, land surface care, and any other costs of compliance with Appendix 1.C. The Cost Estimate shall be calculated based on the point in time when the manner and extent of the operation of the Phosphogypsum Stack System would make the Stack Closure and Long-Term Care the most expensive. The Cost Estimate and all subsequent updates shall be based on what it would cost to hire a Third Party to complete Stack Closure and Long-Term Care in that year, except as provided in Paragraph 1(b), below.
  - b. Subject to the conditions for access set forth below, Simplot may, if the conditions of this Paragraph 1(b) are met, include in its Cost Estimate a cost for soil from a borrow area at the Facility, based on information provided by Simplot describing the soil borrow areas to be used (e.g., location), in lieu of the cost to obtain soil from a Third Party. In that event, Simplot agrees that, if a takeover of Work occurs pursuant to Section VII of the Consent Decree, the United States (including a receiver designated pursuant to Section VII (Work Takeover) of the Consent Decree, or trustee directing Stack Closure and/or Long-Term Care), in addition to their right to Financial Assurance as set forth in the Consent Decree, shall have the same legal right of access to and use of such soil, and any equipment necessary to access and process such soil, as Simplot would have. Simplot shall confirm with its submittal required under Paragraph 4, below, that the United States continue to have a right to access and use the soil, that the soil available is sufficient for Phosphogypsum Stack System Closure, and that Simplot knows of no reasons as to why the United States, or their representatives, could not have access to and use of the borrow area(s) and soil. If, for any reason, Simplot or EPA determines that such access cannot be had, or that the available soil in the borrow area is insufficient for Phosphogypsum Stack System Closure, then Simplot in its next scheduled update to the Cost Estimate or ninety (90) Days prior to Phosphogypsum Stack System Closure, whichever is later, shall submit to EPA an updated Cost Estimate recalculating the soil cost for that quantity of soil needed but determined not to be available in the designated borrow area either: (i) based on the cost of soil from a substitute borrow area at the Facility; (ii) based on the cost of soil and transportation from a substitute borrow area in the vicinity of the Facility on property owned by Simplot; or (iii) if such substitute borrow area is not available, as a cost of a Third Party buying the soil for Phosphogypsum Stack System Closure, and shall provide any additional or alternative Financial Assurance necessary

- to cover this cost on the Anniversary Date. Nothing in this Paragraph 1(b) shall be construed as transferring to the United States or their representatives any obligation that Simplot may have under the law, including permit requirements, to properly manage, close and/or remediate the soil borrow areas, or otherwise creating such obligations for the United States and/or their duly designated representatives.
2. The Cost Estimate shall be calculated in Current Dollars.
  3. Simplot shall not include in any Cost Estimate: (1) any credit for salvage value or a zero cost for handling hazardous waste with potential future value, as set forth in 40 C.F.R. § 264.142(a)(3) & (4); (2) Corrective Action costs in accordance with Paragraph 22 of the Consent Decree; and (3) cost of Groundwater and surface water monitoring and reporting in accordance with Paragraph 22 of the Consent Decree. Financial Assurance established pursuant to Paragraph 26 of the Consent Decree shall also not include any such costs.
  4. Simplot shall submit a Cost Estimate, together with supporting documentation, to EPA in the following manner:
    - a. Simplot shall submit the Cost Estimate based on the current costs (i.e., using that year's current prices) for Stack Closure and Long-Term Care in accordance with this Section.
    - b. Simplot shall submit annually to EPA an updated Cost Estimate reflecting inflationary adjustments, except as set forth in Paragraph 4(d), below. Such adjustment may be made by either method in Paragraph 4(b)(1) or 4(b)(2) below, except as otherwise required in this Appendix:
      1. Recalculating the costs, in Current Dollars (i.e., OSWER Directive No. 9476.00-5, Section 4.4.1); or
      2. Using an inflationary factor derived from the most recent Implicit Price Deflator ("Deflator") for the Gross National Product published by the U.S. Department of Commerce in its Survey of Current Business, in the manner as specified by 40 C.F.R. §§ 264.142(b) and 264.144(b). If the Cost Estimate is due by the end of February, then Simplot shall: (i) use the Deflator for the Gross National Product published for Q1, Q2 & Q3 of the prior year, calculate the change in the Deflator between Q1 and Q2, and the change in Deflator between Q2 and Q3, take the average of these values, and add this average to the Q3 Deflator to impute a Q4 Deflator; or (ii) if the Deflator for the Gross National Product has not been published for Q3 of the prior year by February 10 of the following year, Simplot shall calculate the change in the published Deflator between Q1 and Q2, adding this value both to the Deflator for Q2 to impute a Q3 Deflator and to the imputed Q3 Deflator to impute a Q4 Deflator. If Simplot calculates imputed Deflators by using an average of the change in Deflators from prior quarters because the actual Deflator for Q3 or Q4 were not then available, then annual inflationary

adjustments in subsequent years shall be based on the actual Deflator, as and when published values become available. An example of the inflationary factor calculation is provided in Attachment B of this Appendix.

- c. In the event that Simplot requests a release of an amount in excess of the updated Cost Estimate from the Financial Mechanism establishing Financial Assurance under Section III, other than for a reduced updated Cost Estimate pursuant to Paragraph 4(b)(2) above, Simplot shall: (1) provide a supplement to the Closure Plan with Simplot's request for a reduction in the Financial Assurance; and (2) provide a detailed description of the changes and revisions to the Closure Plan and updated Cost Estimate resulting in the decreased updated Cost Estimate.
- d. Simplot shall:
  1. Submit every five (5) years an update to the Cost Estimate with supporting documentation and an updated Closure Plan, reflecting cost adjustments (e.g., revised treatment protocols (including chemical treatment quantities), additional studies, treatment costs, material and labor cost increases, new or Lateral Expansion of a Phosphogypsum Stack or Component, etc.) as specified in Paragraph 4(d)(2), below. Simplot shall provide the update and associated documentation five (5) years after the submittal of the Cost Estimate (pursuant to Paragraph 1 of this Appendix). Simplot shall also provide such an update to the Cost Estimate for the Facility: (i) in the event of a re-evaluation of when the manner and extent of the operation of the Phosphogypsum Stack System makes the Stack Closure and Long-Term Care the most expensive; (ii) with the submittal of the Permanent Phosphogypsum Stack System Closure Plan as specified in Appendix 1.C of the Consent Decree; and (iii) thirty (30) Days prior to a Facility transfer with the information requested pursuant to Paragraph 18 of this Appendix.
  2. An update to the Cost Estimate submitted under this Paragraph 4(d) shall be adjusted by recalculating the costs, in Current Dollars, as set forth in Paragraph 4(b)(1), above.
    - (a) In the event a specific cost needed to prepare the Cost Estimate has been updated pursuant to Paragraph 4(d)(1), above, within one (1) year, Simplot may adjust that specific cost pursuant to Paragraph 4(b)(2), above.
    - (b) In the event a specific cost needed to prepare the Cost Estimate has not been updated pursuant to Paragraph 4(d)(1), above, within one (1) year and if not otherwise available, then Simplot may utilize the most recent update of that specific cost, and adjust that prior cost pursuant to Paragraph 4(b)(2), above, provided that Simplot identifies the specific cost and includes a brief explanation for adjusting the cost pursuant to Paragraph 4(b)(2), above.



- e. Simplot shall submit an update to the Cost Estimate, in accordance with this Paragraph, seventy-five (75) Days prior to the Anniversary Date of the establishment of the Financial Mechanism, except if otherwise provided herein. If more than one Financial Mechanism is being used to establish Financial Assurance, the update to the Cost Estimate shall be submitted seventy-five (75) Days prior to the earliest Anniversary Date, for a given calendar year, of a Financial Mechanism. Any EPA comments on an annual update to the Cost Estimate that are received by Simplot after forty-five (45) Days following the date of submittal of the annual Cost Estimate shall be addressed by Simplot in the next annual update to the Cost Estimate.
  - f. Simplot shall submit with all Cost Estimates Attachments B and C of this Appendix.
5. Notwithstanding the provisions of Section XII (Information Collection and Retention) of the Consent Decree, Simplot shall maintain, or have electronic access to (such that upon request the information can be readily downloaded and printed), at the Facility for the duration of this Consent Decree, the Initial Closure Plan (Appendix 8) and the most recent update to the Cost Estimate.

III. Financial Assurance for Stack Closure and Long-Term Care

6. Within thirty (30) Days of the Effective Date or within ten (10) Days of EPA's acceptance of Simplot's initially submitted Cost Estimate, whichever is later, and on the first Anniversary Date and annually thereafter, Simplot's CFO shall provide to EPA an originally signed CFO Certification, together with supporting documentation, confirming that it has established Financial Assurance for Stack Closure and Long-Term Care, in an amount no less than the Cost Estimate and pursuant to the requirements of Section III of this Appendix.
7. Once Simplot establishes Section III Financial Assurance for Stack Closure and Long-Term Care, it shall maintain such Financial Assurance pursuant to the requirements of Section III.
8. Financial Assurance for Stack Closure and Long-Term Care under this Section III must comply with the requirements of 40 C.F.R. §§ 264.143(a)-(e) and (g)-(i), 264.145(a)-(e) and (g)-(i), and 264.148, except as clarified and modified in this Section III.
9. Simplot shall use the Cost Estimate generated pursuant to Section II (Cost Estimate), above, in lieu of the cost estimates required pursuant to 40 C.F.R. §§ 264.142 and 264.144 unless otherwise directed in this Appendix, to establish Financial Assurance under this Section III. Simplot shall establish Section III Financial Assurance in an amount at least equal to the Cost Estimate in accordance with the deadlines specified in Paragraph 6.
10. Simplot shall choose from the Financial Mechanisms specified in 40 C.F.R. §§ 264.143(a)-(e) and 264.145(a)-(e) to establish Section III Financial Assurance, provided that, if Simplot is using Third-Party Mechanisms (a trust fund, letter of credit, surety

bond, or insurance), the Trustee of any trust fund, or the provider of any letter of credit, surety bond, or insurance shall not be a Related Party to Simplot. Simplot shall word the Financial Mechanism as specified in Attachment D of this Appendix.

a. For a trust fund, Simplot shall comply with 40 C.F.R. §§ 264.143(a) and 264.145(a), except as modified below:

1. In lieu of complying with 40 C.F.R. §§ 264.143(a)(3)-(4) and 264.145(a)(3)-(4), and if Simplot is providing only a fully funded trust fund to establish Financial Assurance under this Section, then Simplot shall either:

(a) Fully fund the trust within thirty (30) Days of the Effective Date or within ten (10) Days of EPA's acceptance of Simplot's Cost Estimate, whichever is later; or

(b) Submit to EPA for approval, within five (5) Days of the Effective Date or within five (5) Days of Simplot's Cost Estimate submittal, whichever is later: (i) an originally signed CFO Certification, with supporting documentation, explaining in detail Simplot's inability to immediately fund the trust fund, and (ii) a proposal for a pay-in period of no longer than three (3) years, with at least fifty percent (50%) of the Stack Closure and Long-Term Care Cost Estimate to be funded in the first year. Any subsequent request for an extension to an approved pay-in period shall be made at least 180 Days before the close of an approved pay-in period and shall include an originally signed CFO Certification explaining in detail why a longer pay-in period is needed, together with supporting documentation. Such approvals by EPA shall be in its unreviewable discretion.

2. In lieu of 40 C.F.R. § 264.151(a), Simplot shall use the exact wording as specified in Form 1, Attachment D of this Appendix, for the Trust Agreement. Simplot may enter into an addendum to the Trust Agreement ("Addendum") provided that: (a) the Addendum supplements and does not contain terms that conflict, supersede, revise or alter the terms of the Trust Agreement (or the requirements of Appendix 2); and (b) the Addendum is approved by EPA in advance, such approval is within EPA's unreviewable discretion. A Trust Agreement must be accompanied by a formal certification of acknowledgement (see example provided with Trust Agreement, Form 1, Attachment D of this Appendix).

3. Simplot shall update any associated schedules or exhibits of the Trust Agreement, as appropriate, within sixty (60) Days after EPA accepts a change in the amount of the Cost Estimate.

b. For a surety bond guaranteeing payment or performance, Simplot shall comply with 40 C.F.R. §§ 264.143(b)&(c) and 264.145(b)&(c), except that:

1. In addition to the requirements of 40 C.F.R. §§ 264.143(b)(1) & (c)(1) and 264.145(b)(1) & (c)(1), Simplot shall provide an originally signed certification from either Simplot (CFO Certification) or an officer of A.M. Best or a nationally recognized statistical rating organization (NRSRO), documenting that the surety has at least a “secured” financial strength rating of “A” by A.M. Best or an equivalent rating by the NRSRO.
  2. In lieu of 40 C.F.R. §§ 264.143(b)(4)(ii)&(c)(5) and 264.145(b)(4)(ii)&(c)(5), upon EPA issuance of a Work Takeover Notice pursuant to Section VI (Work Takeover) of the Consent Decree stating that Simplot has failed to perform Stack Closure and/or Long-Term Care, if Simplot fails within thirty (30) Days of the Work Takeover Notice to remedy to EPA’s satisfaction the circumstances giving rise to EPA’s issuance of such Work Takeover Notice (Paragraph 47 of the Consent Decree), then the surety will become liable on the bond obligations and EPA may require the surety to meet its obligations pursuant to the terms of the surety bond and Section VII (Work Takeover) of the Consent Decree. A dispute raised by Simplot shall be subject to the dispute resolution provisions set forth in Sections VII (Work Takeover) and XI (Dispute Resolution) of the Consent Decree.
  3. In lieu of 40 C.F.R. §§ 264.143(b)(2), 264.145(b)(2) and 264.151(b), Simplot shall use the exact wording as specified in Form 2, Attachment D of this Appendix, for the wording of the surety bond guaranteeing payment. In lieu of 40 C.F.R. §§ 264.143(c)(2), 264.145(c)(2) and 264.151(c), Simplot shall use the exact wording as specified in Form 3, Attachment D of this Appendix, for the wording of the surety bond guaranteeing performance. Simplot shall use the exact wording as specified in Form 1.A, Attachment D of this Appendix for the wording of the standby trust fund required by 40 C.F.R. §§ 264.143(b)(3)&(c)(3) and 264.145(b)(3)&(c)(3).
  4. In the event that Simplot must provide alternate Financial Assurance subject to EPA approval pursuant to 40 C.F.R. §§ 264.143(b)(4)(iii)&(c)(4)(ii) and 264.145(b)(4)(iii)&(c)(4)(ii) or the surety becomes liable under the terms of the bond upon notification by EPA, due to cancellation (40 C.F.R. §§ 264.143(b)(8)&(c)(8) and 264.145(b)(8)&(c)(9)), a disapproval or notice by EPA shall be subject to dispute resolution in Section XI (Dispute Resolution) of the Consent Decree, but not judicial review. Any dispute raised by Simplot shall not prohibit EPA from requiring the surety to place the guaranteed funds into a standby trust during the pendency of the dispute.
- c. For a letter of credit, Simplot shall comply with 40 C.F.R. §§ 264.143(d) and 264.145(d), except as modified below:
1. In addition to the requirements of 40 C.F.R. §§ 264.143(d)(1) and 264.145(d)(1), as applicable, Simplot shall provide an originally signed CFO Certification

documenting that the provider of the letter of credit is a federally insured financial institution.

2. In lieu of 40 C.F.R. §§ 264.143(d)(8) and 264.145(d)(9), upon EPA issuance of a Work Takeover Notice pursuant to Section VII (Work Takeover) of the Consent Decree stating that Simplot has failed to perform Stack Closure and/or Long-Term Care, if Simplot fails within thirty (30) Days of the Work Takeover Notice to remedy to EPA's satisfaction the circumstances giving rise to EPA's issuance of such Work Takeover Notice (Paragraph 47 of the Consent Decree), EPA may draw on the letter of credit pursuant to the terms of the letter of and Section VII (Work Takeover) of the Consent Decree. A dispute raised by Simplot shall be subject to the dispute resolution provisions set forth in Sections VII (Work Takeover) and XI (Dispute Resolution) of the Consent Decree.
  3. In lieu of 40 C.F.R. §§ 264.143(d)(2), 264.145(d)(2) and 40 C.F.R. § 264.151(d), Simplot shall use the exact wording as specified in Form 4, Attachment D of this Appendix, for the letter of credit and the associated cover letter accompanying the letter of credit. Simplot shall use the exact wording as specified in Form 1.A, Attachment D of this Appendix for the wording of the standby trust fund required by 40 C.F.R. §§ 264.143(d)(3) and 264.145(d)(3).
  4. In the event that Simplot must provide alternate Financial Assurance subject to EPA approval or EPA draws on the letter of credit pursuant to 40 C.F.R. §§ 264.143(d)(9) and 264.145(d)(10), due to cancellation (40 C.F.R. §§ 264.143(d)(5) and 264.145(d)(5)), a disapproval or drawing on the letter of credit by EPA shall be subject to dispute resolution to Section XI (Dispute Resolution) of the Consent Decree, but not judicial review. Any dispute raised by Simplot shall not prohibit EPA from drawing on the letter of credit during the pendency of the dispute.
- d. For insurance, Simplot shall comply with 40 C.F.R. §§ 264.143(e) and 264.145(e) and shall provide an originally signed certification from either Simplot (CFO Certification) or an officer of A.M. Best or an NRSRO, documenting that the insurer has at least a "secured" financial strength rating of "A" by A.M. Best or an equivalent rating by the NRSRO. Simplot also shall:
1. Comply with 40 C.F.R. §§ 264.143(e)(8) and 264.145(e)(8), except that in lieu of the conditions set forth in 40 C.F.R. §§ 264.143(e)(8)(i)-(v) and 264.145(e)(8)(i)-(v) that specify when a policy will remain in full force and effect notwithstanding a failure to pay the premium, the following conditions are substituted: (a) EPA determines that the Facility has been abandoned; (b) the Work required under this Consent Decree is undertaken by EPA; (c) Stack Closure, partial Phosphogypsum Stack System Closure, or Long-Term Care is ordered by EPA or by a U.S. District Court or other court of competent jurisdiction; (d) Simplot is named as debtor in a

voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code; or (e) the premium due is paid.

2. Submit annually a certificate of insurance and a complete copy of the insurance policy, including amendments and endorsements.
  3. In lieu of 40 C.F.R. §§ 264.143(e)(2), 264.145(e)(2) and 264.151(e), Simplot shall use the exact wording as specified in Form 5, Attachment D of this Appendix, for the wording of the Certificate of Insurance.
  4. Notify EPA if it has cause to believe that it will not be able to make a premium payment.
  5. Ensure the assignment requirements of 40 C.F.R. §§ 264.143(e)(7) and 264.145(e)(7) are incorporated into the insurance policy exactly as written, with no additional qualifying conditions.
  6. Ensure that the policy does not allow or offer coverage for liabilities other than those contemplated by the Consent Decree.
11. If Simplot seeks to provide:
- a. More than one Third-Party Mechanism to demonstrate Financial Assurance for Stack Closure and Long-Term Care, pursuant to 40 C.F.R. §§ 264.143(g) and 264.145(g), Simplot shall submit to EPA an originally signed CFO Certification verifying that the Third-Party Mechanisms do not incorporate terms subrogating one Financial Mechanism to another, i.e., designating a prioritization for the release of the funds or the payment of a claim. EPA, if the need arises, will determine in its unreviewable discretion the priority for the release of funds or payment of a claim.
  - b. A Financial Mechanism establishing Financial Assurance at more than one facility pursuant to 40 C.F.R. §§ 264.143(h) and 264.145(h), Simplot:
    1. Shall not provide a single trust fund or insurance policy to cover the multiple facilities in different States, but shall provide each affected State with its own distinct trust fund or insurance policy;
    2. May use the same letter of credit or surety bond for multiple facilities provided that the following conditions are met: (a) the facilities' EPA Identification Numbers, names, addresses, and the Stack Closure and Long-Term Care Cost Estimate(s) associated with each particular facility are clearly specified in the Financial Mechanism; and (b) the Financial Mechanism clearly states that there can be a release of funds for a specified facility without requiring the entire obligation covered by the Financial Mechanism to be placed in the stand-by trust(s); and

3. Shall not release funds designated for one or more facilities in another State except upon written agreement of EPA, Simplot, and the affected State(s).

IV. Financial Assurance for Third-party Liability

12. Within thirty (30) Days of the Effective Date, and on the first Anniversary Date and annually thereafter, Simplot's CFO shall provide to EPA a Financial Mechanism for Third-party liability along with an originally signed CFO Certification, together with supporting documentation, confirming that it has established Financial Assurance to compensate a Third-party for bodily injury or property damage that might result from sudden accidental or non-sudden accidental occurrences associated with the operation of the Phosphogypsum Stack System, Stack Closure or Long-Term Care at the Facility ("Financial Assurance for Third-party Liability"). The Financial Assurance for Third-party Liability shall comply with 40 C.F.R. § 264.147(a)-(e), (h)-(k), except as provided in Paragraph 13 below, and Simplot shall maintain such Financial Assurance during operation of the Phosphogypsum Stack System and during Phosphogypsum Stack System Closure. If Simplot wishes to propose an adjustment to the amount of Financial Assurance pursuant to 40 C.F.R. § 264.147(c), Simplot shall submit to EPA for approval an originally signed CFO Certification explaining the basis for the proposed adjustment, together with supporting documentation demonstrating that an adjustment is appropriate under 40 C.F.R. § 264.147(c). Until such time as EPA approves the adjusted Financial Assurance in writing, Simplot shall provide Financial Assurance for Third-party Liability as otherwise required herein. Nothing in this Paragraph shall be construed to waive or limit EPA's right, pursuant to 40 C.F.R. § 264.147(d), to adjust the level of Financial Assurance required in 40 C.F.R. § 264.147(a)&(b). EPA's determination of whether or not to approve Simplot's request under 40 C.F.R. § 264.147(c) is subject to dispute resolution under Section XI (Dispute Resolution) of the Consent Decree, but not judicial review.
13. Simplot's Financial Assurance for Third-party Liability shall comply with 40 C.F.R. §§ 264.147(a)-(b) & (h)-(j) as modified by this Paragraph. If Simplot is using a trust fund, letter of credit, or surety bond, the Trustee of any trust fund, or the provider of any letter of credit or surety bond shall not be a Related Party to Simplot. Simplot shall word the Financial Mechanism as specified in Attachment D, Form 6 of this Appendix.
  - a. For a surety bond or for insurance, Simplot shall demonstrate that the surety and the insurer have at least a "secured" financial strength rating of "A" by A.M. Best or an equivalent rating by an NRSRO. Such demonstration shall be in the form of an originally signed certification from either Simplot (CFO Certification) or an officer of A.M. Best or the NRSRO.
  - b. For a letter of credit, Simplot shall ensure that the provider of the letter of credit is a federally insured financial institution.

V. Information Gathering

14. For purposes of Appendix 2, information gathering shall be governed by Paragraphs 27 and 85 of the Consent Decree unless otherwise specified in this Appendix.

VI. Temporary Non-Compliance

15. If Simplot determines that it has violated or anticipates violating any requirement of this Appendix, Simplot shall follow the procedures below in Paragraph 15(a) to correct the non-compliances. If, after following the procedures in Paragraph 15(a), there remains non-compliance or anticipated non-compliance, then any dispute raised by Simplot regarding EPA's refusal to approve a plan under this Paragraph shall not prohibit EPA from accessing existing Financial Assurance. If Simplot fails to meet a compliance schedule or the terms of a compliance plan under this Appendix: (i) Simplot shall be deemed without Financial Assurance for purposes of enforcement; and (ii) EPA shall not be precluded from accessing or collecting any existing Financial Assurance.
- a. For all non-compliance or anticipated non-compliance of this Appendix, Simplot shall within ten (10) Days of the non-compliance determination submit to EPA, an originally signed CFO Certification together with supporting documentation, explaining in detail the nature of the violation and stating whether or not the non-compliance can be rectified by Simplot within thirty (30) Days. If Simplot does not believe that it can rectify the non-compliance within thirty (30) Days, then within ten (10) Days of its notice Simplot shall submit to EPA for approval a plan and schedule for correcting the violation. If applicable, such a plan shall include additional or alternate Financial Assurance. In the event that alternate or additional Financial Assurance is a component of the plan and schedule, then the Financial Assurance shall be provided as soon as possible, but no later than sixty (60) Days after Simplot's notice of Simplot's non-compliance. Simplot may request additional time to provide the alternate or additional Financial Assurance and such request shall include a detailed explanation and supporting documentation.
- b. EPA's determination of whether to approve Simplot's plan and/or schedule for correcting the violation(s) is subject to dispute resolution under Section XI (Dispute Resolution) of the Consent Decree, but not judicial review. The time frames applicable to both Simplot and the United States for notices and submissions under Section XI (Dispute Resolution) of this Consent Decree shall be reduced by half for any plan requiring alternate or additional Financial Assurance.
16. Simplot shall not be subject to stipulated penalties pursuant to Section IX (Stipulated Penalties) of the Consent Decree for temporary non-compliance with this Appendix provided that: (a) Simplot complies with the notice and submittal requirements of Paragraph 15, above; (b) EPA approves the plan and schedule for correcting the violation, including any additional or alternative Financial Assurance; (c) Simplot within ten (10)

Days of EPA's approval commences the correction of the violation in accordance with the approved schedule, including if applicable the establishment of any additional or an alternate form of Financial Assurance; and (d) EPA determines that Simplot's violation is not due to Simplot's lack of diligence or good faith (the burden of proving this shall rest with Simplot).

VII. Business Transactions

17. No transfer of ownership or operation of a Facility shall relieve Simplot of its Financial Assurance obligations under this Consent Decree, except as provided by Section X (Force Majeure) and Section II (Applicability) of the Consent Decree.
18. At least thirty (30) Days prior to any transfer, Simplot shall submit to EPA information explaining the proposed transfer in detail and stating whether Simplot requests the transfer of its Financial Assurance responsibilities to the transferee pursuant to Section II (Applicability) of the Consent Decree and Paragraph 19(b), below.
19. In the event that Simplot transfers ownership or operation of all or a portion of the Facility (i.e., areas that are located inside the footprint of the Phosphogypsum Stack System of the Facility or otherwise subject to activities included in the Cost Estimate and subject to Financial Assurance obligations):
  - a. If Simplot is to retain its Financial Assurance obligations upon the transfer of ownership or operation of all or a portion of the Facility, Simplot, based on the Cost Estimate in Current Dollars, shall establish and fund a trust fund, or obtain a surety bond or letter of credit in accordance with this Appendix. Any existing trust fund established pursuant to this Appendix shall remain in place. Simplot shall provide EPA the appropriate documentation evidencing the trust fund, surety bond, or letter of credit by the date of the Facility transfer. If using a trust fund, the portion of funds vested in the trust fund that are not required to meet annual withdrawals shall be invested in U.S. Treasury Bills, or market-based notes and bills that achieve an investment goal or preservation of principle and guarantee an inflation-adjusted rate of return no less than the 30-Year Treasury Constant Maturity Rate average for the previous twelve (12) months from the date of the annual Cost Estimate. If Simplot wishes to propose alternate Financial Mechanism(s) in lieu of the trust fund, surety bond, or letter of credit, Simplot at least thirty (30) Days prior to the transfer shall submit an originally signed CFO Certification from Simplot's CFO, together with supporting documentation, explaining the compelling reasons why the proposed alternate Financial Mechanism is being requested and is an equivalent substitute for the trust fund, surety bond, or letter of credit. Upon EPA's approval, which shall be subject to dispute resolution pursuant to Section XI (Dispute Resolution) of the Consent Decree but shall not be subject to judicial review, Simplot shall establish the approved Financial Assurance. If by the date of the transfer, EPA does not approve such a request or Simplot has not put in place the approved Financial Assurance, then



Simplot shall fully fund the trust fund or obtain a surety bond or letter of credit, as described above.

- b. If the transferee agrees to assume Simplot's Financial Assurance obligations, Simplot shall submit to EPA for approval an originally signed certification by the transferee's CFO, together with supporting documentation, explaining in detail its ability to provide Financial Assurance pursuant to the requirements of this Appendix and agreeing to provide the Financial Assurance if approved by EPA pursuant to Section II (Applicability) of the Consent Decree. Simplot shall comply with the requirements of Paragraph 19(a), above, until: (1) EPA has approved the transferee's proposed Financial Assurance; (2) the United States consents to the transfer of obligations pursuant to Section II (Applicability) of the Consent Decree; (3) the transferee has established the approved Financial Assurance; and (4) EPA has given its consent for Simplot to terminate its Financial Assurance.
20. If Simplot is providing Financial Assurance through the use of any Financial Mechanism other than the exclusive use of a fully funded trust fund in Current Dollars, in the event of a business transaction that results, or Simplot determines will result, in an adverse material change to Simplot's financial or corporate structure that provides Simplot or its successor (or a Guarantor of Simplot or its successor) with insufficient funds to satisfy the carrying costs of its approved Financial Assurance instrument(s), including premium payments, collateral requirements, and/or financial covenants imposed by the instrument provider, for the 365 Days immediately following the business transaction, then Simplot shall provide notice to EPA within fourteen (14) Days of identifying such adverse material change and comply with the requirements for Financial Assurance in Paragraph 19(a), above.

#### VIII. Reservation of Rights

21. If EPA determines at any time that the Financial Assurance provided by Simplot no longer satisfies the requirements of this Consent Decree, it shall notify Simplot. EPA may base this determination on Simplot's failure to provide notices or documentation required by this Appendix as well as on a substantive evaluation of Simplot's Financial Assurance. As soon as possible but at least within sixty (60) Days of written notice from EPA that Simplot's Financial Assurance no longer satisfies the requirements of this Consent Decree, Simplot shall submit to EPA for approval revised or alternate Financial Assurance that satisfies the requirements of this Consent Decree. Simplot shall not cancel the existing Financial Assurance until the revised or alternate Financial Assurance has been approved by EPA, and EPA has provided written consent permitting Simplot to cancel the existing Financial Assurance. Failure to timely provide alternative Financial Assurance as required by this Section (or any Paragraph of this Appendix that references this Section) is not subject to the provisions of Section VI (Temporary Non-Compliance) of this Appendix. EPA's determination shall be subject to dispute resolution pursuant to Section XI (Dispute Resolution) of this Consent Decree, but not judicial review, and the time frames for

notices and submissions under the dispute resolution process shall be reduced by half (e.g., under Informal Dispute Resolution Simplot shall submit its Notice of Dispute within fifteen (15) Days).

22. Within sixty (60) Days after receiving certification from Simplot and a qualified professional engineer that the Long-Term Care period has been completed in accordance with the approved Closure Plan, EPA will notify Simplot that it is no longer required to maintain Financial Assurance for Long-Term Care of the Facility, unless EPA has reason to believe that Long-Term Care has not been completed in accordance with the approved Closure Plan. EPA shall provide Simplot a detailed written statement of any such reason to believe that Long-Term Care has not been in accordance with the approved Closure Plan.

*Instructions: The following is the form of the Chief Financial Officer's ("CFO") certification that shall be used when required under Appendix 2 of the Consent Decree. The CFO Certification shall be worded as follows except that instructions in the brackets are to be replaced with the relevant information and the brackets deleted.*

**Chief Financial Officer Certification**

I hereby certify as the Chief Financial Officer [*or insert, as appropriate, "a duly designated corporate officer"*] of [*insert Company name/designation*] under penalty of law, in accordance with the requirements of [*insert the specific Section/Paragraph of Appendix 2*] of the Consent Decree entered by the [*insert the District Court designation and case information*] that [*insert the substance of the certification being made and any additional information that is relevant for the certification*]. Based on my inquiry of persons directly responsible for gathering the information for this certification (and any attached documentation), 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 possible fine and imprisonment for knowing violations.

[*If required under Appendix 2 as part of the CFO Certification.*] I have attached as supporting documentation: [*insert a description of/information on the supporting documentation.*]

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

**STACK CLOSURE AND LONG-TERM CARE COST ESTIMATE  
FOR PHOSPHOGYPSUM STACK SYSTEM<sup>1</sup>**

Date: \_\_\_\_\_

Date of Review: \_\_\_\_\_

Reviewer Signature: \_\_\_\_\_

**INSTRUCTIONS:**

1. Appendix 8 (Table 3.5) provides the three areas of primary costs associated with the Phosphogypsum Stack System Closure Plan: physical closure cost; Long-Term Care cost; and annual water treatment costs.
2. This form shall be used to provide the information regarding adjustments to the Cost Estimate as directed in Section II of Appendix 2.
3. For annual inflationary adjustments, fill in all sections, below, as appropriate. If using the inflationary factor, fill in Section II.A, below. If recalculating the Cost Estimate in Current Dollars, fill in Section II.B, below.
4. Every fifth year, Simplot shall make an adjustment to the Cost Estimate as directed by Paragraph 4.d. of Section II, Appendix 2 ("Substantive Adjustment").
5. The Attachment B-1 Forms 1-3 and Section II.B, below, shall be completed for the Substantive Adjustment to the Cost Estimate that is to be provided with the submittal of the updated Closure Plan (see Paragraph 4.d.(1), Section II of Appendix 2).
6. This form is to be sent to the appropriate individual(s) identified in Section XIV (Notices) of the Consent Decree.
7. All Cost Estimates entered on this form may be rounded to the nearest hundred thousand dollars.

**I. GENERAL INFORMATION**

Facility Name: \_\_\_\_\_ EPA ID #: \_\_\_\_\_

Facility Address: \_\_\_\_\_

Owner/Operator: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

**II. COST ESTIMATE ADJUSTMENT**

Please check below the appropriate boxes identifying the type of Cost Estimate adjustment under this Section. In addition, Simplot shall complete Attachment B-1 and, if needed, Attachment B-2.

**A. Inflation Factor Adjustment to Cost Estimate**

The Cost Estimate may be adjusted for inflation by using an inflation factor. Please complete the calculations below in each subsection to derive the inflation factor that must be used when adjusting the Cost Estimate for inflation and complete subsections A(1)-(3), below.

<sup>1</sup> The Attachment applies to the closure and Long-Term Care activities associated with a Phosphogypsum Stack System or a Component thereof.

**Inflation Factor**

Last Published or Imputed Quarterly Deflator

Quarterly Deflator in effect at the time of the last Current Dollar Cost Estimate (*[identify the Deflator date]*):

÷  Inflation Factor:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(1) Adjusted Physical Closure Cost Estimate – Current Dollars

Physical Closure cost (last): \_\_\_\_\_

Physical Closure cost (last Current Dollar Cost Estimate)	X	Inflation Factor	=	Inflation Adjusted Physical Closure Cost Estimate (Current Dollars)
_____		_____		_____

(2) Adjusted Long-Term Care Cost Estimate – Current Dollars

Long-Term Care cost (last): \_\_\_\_\_

Long-Term Care cost (last Current Dollar Cost Estimate)	X	Inflation Factor	=	Inflation Adjusted Long-Term Care cost (Current Dollars)
_____		_____		_____

(3) Adjusted Water Treatment Cost Estimate – Current Dollars

Water Treatment cost (last): \_\_\_\_\_

Water Treatment cost (last Current Dollar Cost Estimate)	X	Inflation Factor	=	Inflation Adjusted Water Treatment cost (Current Dollars)
_____		_____		_____

**Total Cost Estimate Using Inflation Factor**

Physical Closure Cost Estimate: \_\_\_\_\_

+

Long-Term Care Cost Estimate \_\_\_\_\_

+

Water Treatment Cost Estimate \_\_\_\_\_

**Total Cost Estimate Financial Assurance** \_\_\_\_\_

**B. Current Dollar and Substantive Adjustment to Cost Estimate**

If performing an annual inflationary adjustment in Current Dollars or a Substantive Adjustment, then submit the certification from the independent qualified professional engineer (box 1).

(1) Certification by Third-Party Engineer

This is to certify that the estimate of physical closure, Long-Term Care, and water treatment costs specified below and in Attachment B-1, pertaining to the engineering features of this Phosphogypsum Stack System, have been examined by me and found to conform to engineering principles applicable to such systems. In my professional judgment, the Cost Estimate is a true, correct and complete representation of the estimated financial liabilities for Stack Closure and Long-Term Care of the Facility as of *[date]*, performed in accordance with the methodology set forth in Section II, Appendix 2, of the Consent Decree

- (a) Physical Closure Cost Estimate: \_\_\_\_\_
  - 1. Physical Closure costs (\$ *[insert current costs]*)
- (b) Long-Term Care Cost Estimate: \_\_\_\_\_
  - 1. Long-Term Care costs (\$ *[insert current costs]*)
- (c) Water Treatment Cost Estimate: \_\_\_\_\_
  - 1. Water treatment costs (\$ *[insert current costs]*)
- (d) **Total Cost Estimate:** \_\_\_\_\_  
(Add lines (a), (b), and (c), above.)

\_\_\_\_\_  
Signature of Engineer

\_\_\_\_\_  
Idaho Registration Number (affix seal)

\_\_\_\_\_  
Name & Title (please type)

\_\_\_\_\_  
Mailing Address

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
Engineer E-Mail Address

**Example of Inflationary Factor Calculation**

For use in deriving imputed deflators for annual inflationary adjustments for Appendix 2, Section II (Cost Estimate).

	(A)	(B)	(C)	(D)	(E)
	Quarter	Published Deflator	Change	Average Change	Imputed Deflator
1	Q1				
2	Q2				
3	Q3 (imputed, if actual not yet published)				
4	Q4 (imputed, if actual not yet published)				

Instructions: See also Examples 1 and 2, below.

1. The fiscal quarters for the prior year are listed in Column (A). The *first* entry in this column is Q1 of the prior year, and the *last* entry in this column is Q4 of the prior year.
2. Add the *published* quarterly deflators into Column (B). Do not add any deflators to this column, if they have not yet been published.
3. For each published deflator in Column (B), add the change from the previous quarter in column (C). For example, to calculate the change for Q2, subtract the published deflator value for Q1 from the published deflator value in Q2. Column (C) should include entries only for quarters for which a published deflator is available.
4. The value for Column (D) is calculated as the average of all entries in Column (C). Enter this value once, in the row with the latest published quarterly deflator.
5. Add the value in Column (D) to the latest published quarterly deflator to calculate the following imputed quarterly deflator in Column (E). (The entries in this column will correspond to the quarters for which there are no published quarterly deflators.) To impute quarterly deflators for more than one quarter, continue adding the value in Column (D) to each imputed quarterly deflator to calculate the quarterly deflator for the next year.

**Example 1: Imputing a Deflator when Q1 through Q3 Deflators are published, but Q4 Deflator is not**

	(A)	(B)	(C)	(D)	(E)
	Quarter	Published Deflator	Change	Average Change	Imputed Deflator
1	Q1 2013	106.324			
2	Q2 2013	106.608	0.284		
3	Q3 2013	107.044	0.436	0.360	
4	Q4 2013				107.404

This example assumes that the latest published quarterly deflator is Q3 2013. The imputed quarterly deflator for Q4 2013 is found in Cell 4E, **107.404**.

**Example 2: Imputing a Deflator when Q1 through Q2 Deflators are published, but Q3 and Q4 Deflators are not**

	(A)	(B)	(C)	(D)	(E)
	Quarter	Published Deflator	Change	Average Change	Imputed Deflator
1	Q1 2013	106.324			
2	Q2 2013	106.608	0.284	0.284	
3	Q3 2013				106.892
4	Q4 2013				107.176

This example assumes that the latest published quarterly deflator is Q2 2013. Because there are only two quarters with published deflators in Column (B), the values in Column (C) and Column (D) are the same. The value in Cell D2 is added to Cell B2 to derive the imputed deflator for Q3 2013 (see Cell E3). To derive the imputed deflator for Q4 2013, the value in Cell D2, is added to imputed deflator for Q3 2013 (Cell E3) to derive the imputed deflator for Q4 2013 (Cell E4).

Attachment B-1

Form 1

**A. GYPSUM STACK CLOSURE**

Activity	Quantity	Unit	Unit Cost	Total Cost
<b>1. Top Grading and Cover</b>				
1a. General Excavation and Fill		cy		\$0
1b. Dewatering, Fine Grading & Compaction		acres		\$0
1c. 60-mil HDPE Liner Materials (Lime Ponds)		acres		\$0
1d. 60-mil HDPE Liner Installation (Lime Ponds)		acres		\$0
1e. 40-mil HDPE Liner Installation (Other Top Ponds)		acres		\$0
1f. 40-mil HDPE Liner Installation (Other Top Ponds)		acres		\$0
1g. 24" Thick Soil Cover		cy		\$0
1h. Grassing by Seeding		acres		\$0
<b>1i. Subtotal</b>		<b>acres</b>		<b>\$0</b>
<b>2. Side Slope Grading and Cover</b>				
2a. General Excavation and Fill		cy		\$0
2b. Fine Grading & Compaction		acres		\$0
2c. Dolomite Addition		acres		\$0
2d. 12" Thick Soil Cover		cy		\$0
2e. Grassing by Seeding		acres		\$0
<b>2f. Subtotal</b>		<b>acres</b>		<b>\$0</b>
<b>3. Side Slope Drains</b>		<b>lf</b>		<b>\$0</b>
<b>4. Toe Drain</b>		<b>lf</b>		<b>\$0</b>
<b>5. Mid-Slope Swale</b>				
5a. Grading & Compaction		acres		\$0
5b. Fine Grading & Compaction		acres		\$0
5c. 60-mil HDPE Textured Liner Materials		acres		\$0
5d. 60-mil HDPE Textured Liner Installation		acres		\$0
5e. 24" Thick Soil Cover (3 mile RT for borrow soil)		cy		\$0
5f. Grassing by Seeding & Sodding		acres		\$0
<b>5g. Subtotal</b>		<b>acres</b>		<b>\$0</b>
<b>6. Toe Drainage Swale and Surge Ponds</b>				
6a. Grading & Compaction		acres		\$0
6b. Fine Grading & Compaction		acres		\$0
6c. 60-mil HDPE Textured Liner Materials		acres		\$0
6d. 60-mil HDPE Textured Liner Installation		acres		\$0
6e. 24" Thick Soil Cover (3 mile RT for borrow soil)		cy		\$0
6f. Grassing by Seeding & Sodding		acres		\$0
<b>6g. Subtotal</b>		<b>acres</b>		<b>\$0</b>
<b>7. Surface Water Control</b>		<b>acres</b>		
<b>8. Security Fence (existing)</b>		<b>lf</b>		
<b>9. Security Fence Gates and Signage (existing)</b>		<b>lump</b>		
<b>10. Subtotal</b>		<b>acres</b>		<b>\$0</b>
11. Permitting		lump		
12. Design, Construction Management & QA/QC [%]		lump		\$0
13. Construction Surveying [%]		lump		\$0
<b>SUBTOTAL STACK CLOSURE</b>		<b>acres</b>		<b>\$0</b>



**B. RETURN WATER/SURGE POND****1. Grading and Cover**

1a. Dewatering, Fine Grading & Compaction	-	
	acres	\$0
1b. 40-mil HDPE Liner Materials	acres	\$0
1c. 40-mil HDPE Liner Installation	acres	\$0
1d. 24" Thick Soil Cover	cy	\$0
1e. Grassing by Seeding	acres	\$0
<b>1f. Subtotal</b>	<b>acres</b>	

**2. Surface Water Control**

lump \$0

**3. Subtotal**

acres \$0

**4. Design, Construction Management & QA/QC [%]**

lump \$0

**5. Construction Surveying [%]**

lump \$0

**TOTAL RETURN POND CLOSURE COST**

acres \$0

**C. LIME SLUDGE POND CLOSURE****1. Grading and Cover**

1a. Dewatering, Drying & Surface Stabilization	-	
	acres	\$0
1b. 12" Thick Soil Cover (40 acres)	cy	\$0
1c. 24" Thick Liner Soil Cover (20 acres)	cy	\$0
1d. Grassing by Seeding	acres	\$0
<b>1e. Subtotal</b>	<b>acres</b>	<b>\$0</b>

**2. Surface Water Control (included in line A.7)**

lump

**3. Subtotal**

acres \$0

**4. Design, Construction Management & QA/QC [%]**

lump \$0

**5. Construction Surveying [%]**

lump \$0

**LIME SLUDGE POND CLOSURE**

acres \$0

**D. 5-YEAR CLOSURE PERIOD O&M AND MONITORING****1. O&M included with Water Treatment and Water Treatment Labor Costs**

\$0

**2. Surface Water Monitoring included with Long-Term Care Costs**

\$0

**3. Groundwater Monitoring included in Long-Term Costs**

\$0

**E. ADMINISTRATIVE COSTS during 5-year Closure Period****1. Project Management, Accounting and Construction Management****2. Vehicle Rental**

\$0

**3. Trustee Expense**

\$0

\$0

**SUBTOTAL ADMINISTRATIVE COSTS**

**F. REGIONAL CONSTRUCTION FACTOR**  
RSMMeans 2018, Lakeland Florida to Pocatello, Idaho \$0

**G. CONTINGENCY (5%)** \$0

**TOTAL CLOSURE CONSTRUCTION COST** acres

Attachment B-1

Form 2

**LONG-TERM CARE COST ESTIMATE  
 J.R. SIMPLOT DON PLANT FACILITY  
 (Existing Plus 5-Year Geometry)**

Post Closure Care Items	Estimated Annual Cost (____ Dollars)		
	Initial Closure	Pond Closure	Post Closure Care
	[5 YEARS]	[10 YEARS]	[50 YEARS]
1. Administrative, Inspection Costs			
2. Vehicle Costs			
3. Trustee Costs (Surety and/or trust)			
4. Site Security/Fence Maintenance			
5. Monitoring Wells Sampling and Testing			
6. Surface Water Sampling and Testing			
7. Mowing			
8. Land Surface Care & Contingency Repairs			
9. Pump Operation, Maintenance			
10. Piezometer Operation, Maint. & Contingency Repairs			
<b>TOTAL ANNUAL COST</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>TOTAL COST INCLUDING 5% CONTINGENCY ON ITEMS 1, 2 &amp; 3</b>			
Inflation factor: December 2018 to December 2020			
<b>TOTAL LONG-TERM CARE COSTS In December 2020 dollars</b>			
NOTES AND ASSUMPTIONS:			
9. No piezometer operation costs are anticipated at this time for Don Plant.			

Attachment B-1

Form 3

**COST FOR PROCESS WATER TREATMENT  
 J.R. SIMPLOT DON PLANT FACILITY  
 (Existing Plus 5-Year Geometry)**

Item	Process Water			
	Quantity		Treatment	
	Acre - Feet	Billion Gal.	Unit Cost (\$/1000 Gal)	Cost (MM\$)
1. Pondered Water to Evaporate		0.00		
2. Drainable Pore Water to Evaporate		0.00		
3. Drainable Pore Water to Treat				
4. Total Infiltration		0.00		
5. Water Balance During Closure		0.00		
<b>TOTAL WATER QUANTITY</b>	<b>0</b>	<b>0.00</b>		

Expenditure Period	Water Treated Billion Gallons	Treatment Cost (MM\$)	Avg. Unit Cost (\$1000 Gal)	Treatment Cost with Contingency
Year 1 through 5				
Year 6 through 15				
Year 16 through 65				
Year 66 through 150				
<b>TOTAL QUANTITY AND TREATMENT COST</b>	<b>0.00</b>	<b>0.00</b>		

Inflation Factor: December 2018 Projected to December 2020 Dollars

**TOTAL QUANTITY AND TREATMENT COSTS (2020\$)**

Notes and Assumptions:



**ADJUSTING LONG-TERM CARE AND ASSOCIATED WATER TREATMENT COSTS IN THE CLOSURE PLAN TO CALCULATE CURRENT COSTS**

Instructions:

1. Appendix 8 (Table 3.5) provides the three areas of primary costs associated with the Closure Plan: physical closure cost; Long-Term Care cost; and annual water treatment costs.
2. Use the information and formulas, below, to determine the Current Dollars for the physical closure, Long-Term Care and annual water treatment costs in the Closure Plan (i.e., columns [C] and [E], below).
3. The physical closure, Long-Term Care and annual water treatment costs in the Closure Plan in Current Dollars to be used in columns [B] and [D], below, shall be derived, as appropriate, by calculating the inflation adjusted physical closure, Long-Term Care and water treatment costs pursuant to Section II.A.(1)-(3) of Attachment B.

<b>r =</b>	Inflation Factor	As specified in Paragraph 4.b(2), Appendix 2,
<b>t =</b>	Year	Year in which costs are incurred.
<b>CE date =</b>	Year	Year in which costs are estimated.

Year	Physical Closure Costs		Long-Term Care Costs		Associated Water Treatment Costs	
	Current Dollars	Inflated Annual Dollars (as of year in which cost incurred)	Current Dollars	Inflated Annual Dollars (as of year in which cost incurred)	Current Dollars	Inflated Annual Dollars (as of year in which cost incurred)
[A]			[B]	$[C] = [B] * (r)^{(t)} - [CE\ Date]$	[D]	$[E] = [D] * (r)^{(t)} - [CE\ Date]$
2023						
2024						
2025						
2026						
2027						
2028						
2029						
2030						
2031						
2032						
2033						
2034						
2035						
2036						
2037						
2038						
2039						
2040						
2041						
2042						

Year	Physical Closure Costs		Long-Term Care Costs		Associated Water Treatment Costs	
	Current Dollars	Inflated Annual Dollars (as of year in which cost incurred)	Current Dollars	Inflated Annual Dollars (as of year in which cost incurred)	Current Dollars	Inflated Annual Dollars (as of year in which cost incurred)
[A]			[B]	[C] = [B] * (r) <sup>(t)</sup> - [CE Date]	[D]	[E] = [D] * (r) <sup>(t)</sup> - [CE Date]
2043						
2044						
2045						
2046						
2047						
2048						
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2076						
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2078						

Year	Physical Closure Costs		Long-Term Care Costs		Associated Water Treatment Costs	
	Current Dollars	Inflated Annual Dollars (as of year in which cost incurred)	Current Dollars	Inflated Annual Dollars (as of year in which cost incurred)	Current Dollars	Inflated Annual Dollars (as of year in which cost incurred)
[A]			[B]	$[C] = [B] * (r)^{(t)} - [CE\ Date]$	[D]	$[E] = [D] * (r)^{(t)} - [CE\ Date]$
2079						
2080						
2081						
2082						
2083						
2084						
2085						
2086						
2087						
2088						
2089						
2090						
2091						
2092						
[...]						

**Calculating Annual Costs for Closure**

*Instructions: According to Appendix II, Section 2, Paragraph 4(f), Simplot shall submit Attachment C with every Cost Estimate. Attachment C must be updated annually only for inflation pursuant to Appendix 2, Section II, Paragraph 4(b), and must be updated every five years pursuant to the requirements in Appendix 2, Section II, Paragraph 4(d). The costs represented in Attachment C are in Current Dollars for the year in which the submittal is required. When filling out Attachment C, use the information and definitions specified below, and provide any assumptions utilized to provide the information. If additional columns are required to accurately represent the annual volume of water to be addressed during Stack Closure or Long-Term Care, insert such information with appropriate notes and assumptions for the additional information.*

1. **Ponded Water Inventory** is the annual volume of water to be removed from any process water cooling pond, the water on top of the Phosphogypsum Stack, the return canal and collection ditches, and from other storage or surge ponds, or sumps in excess of ¼ acre, that are part of the Phosphogypsum Stack System.
2. **Drainable Pore Water** is the annual volume of water contained within the pores of the Phosphogypsum that gravity drains during and after closure of the Phosphogypsum Stack.
3. **Total Annual Water Volume** is the summation of Ponded Water Inventory, water balance during closure, and Drainable Pore Water.
4. **Annual Average Treatment Rate**, in gallons per minute (GPM), is determined by dividing the Total Annual Water Volume by 525,600 minutes per year.
5. **Annual Water Treatment Cost** is the total annual cost in millions of dollars needed for the Total Annual Water Volume to manage and treat the process water.
6. **Planning & Closure Period O&M and Monitoring Costs** represent annual program management costs, miscellaneous O&M expenses, Surface Water monitoring costs, Groundwater monitoring costs and piezometer installation costs incurred during the fifteen-year closure construction period.
7. **Physical Closure Costs** represent the annual cost of all materials, labor and equipment to close the Phosphogypsum Stack System, including but not limited to: grading and earthwork with soil and Phosphogypsum; HDPE Liner and associated geosynthetics; cost of clay and mixing if utilized; Liner soil cover; side slope Drains; Toe Drains; sumps/pump stations; header pipes; grassing soil and Phosphogypsum surfaces; security fence; Surface Water control; permitting and design services; and construction management, QA/QC, and surveying.
8. **Program Management Costs** represent the annual costs to manage the Facility during the 50-year Long-Term Care period.
9. **Long-Term Care Cost** is based on annual: (a) costs for on-site personnel to conduct maintenance, inspection and care activities during the Long-



*Term Care period with a 5% contingency allowance; (b) Surface Water and Groundwater monitoring and analysis costs; (c) mowing and land surface care costs; (d) contingency repairs (e.g., restoration of eroded areas); and (e) pump operation and maintenance costs (e.g., convey water from seepage collection system to water treatment).*

- 10. **Total Water Treatment and Closure Costs** represent the sum of the Annual Water Treatment Costs, Planning & Closure Period O&M and Monitoring Costs, Closure Construction Costs, Long-Term Care Period Program Management Costs, and Long-Term Care Costs.*

**Attachment C - ANNUAL COSTS FOR CLOSURE  
 \_\_\_\_\_ FACILITY  
 Year 20\_\_ CURRENT CONDITION CLOSURE**

Period	Sequence Year	Calendar Year	Physical Closure Cost (\$)	Long-Term Care Cost (\$)	Water Volume (billion gallons)			Capital Cost for Treatment (\$)	Annual Average Treatment Rate (gpm)	Annual Water Treatment Cost (\$)	Total Annual Cost (\$)	
					Ponded Water Inventory	Drainable Pore Water	Total Annual Water Volume					
15-year Closure Construction Period	1	20__										
	2	20__										
	3	20__										
	4	20__										
	5	20__										
	6	20__										
	7	20__										
	8	20__										
	9	20__										
	10	20__										
	11	20__										
	12	20__										
	13	20__										
	14	20__										
	15	20__										
50-year Post-Closure Construction Long-Term Care Period	1	20__										
	2	20__										
	3	20__										
	4	20__										
	5	20__										
	6	20__										
	7	20__										
	8	20__										
	9	20__										
	10	20__										
	11	20__										
	12	20__										
	13	20__										
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	41	20__										
	42	20__										
	43	20__										
	44	20__										
	45	20__										
	46	20__										
	47	20__										
	48	20__										
	49	20__										
	50	20__										
	100	20__										
	<b>Total Construction/Care Cost (\$)</b>											
	<b>Total Water Volume (Billion gal)</b>											
	<b>Total Water Treatment Cost (\$)</b>											

*Instructions: The trust agreement for a trust fund, as specified in Appendix 2 of the Consent Decree, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.*

## **TRUST AGREEMENT**

Trust Agreement, the “Agreement,” entered into as of [date] by and between [name of the owner or operator], a [name of State] [insert “corporation,” “partnership,” “association,” or “proprietorship”], the “Grantor,” and [name of corporate trustee], [insert “incorporated in the State of ----” or “a national bank”], the “Trustee.”

Whereas, EPA has entered into a Consent Decree with [Defendant and the owner or operator of the Facility(ies)] requiring [Defendant and the owner or operator of the Facility(ies)] to provide Financial Assurance that funds will be available when needed for Stack Closure and/or Long-Term Care of its Facility[ies] covered under the Consent Decree [need to insert additional description of the Consent Decree].

Whereas, the Grantor may elect to establish a trust to provide, in conjunction with other allowable Financial Assurance mechanisms as specified in Appendix 2, for all or part of such Financial Assurance for the Facility[ies] identified herein,

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee,

Now, Therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:<sup>1</sup>

(a) The term “Grantor” means the owner or operator of the Facility[ies] who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term “Trustee” means the Trustee who enters into this Agreement and any Successor Trustee.

Section 2. Identification of Facility[ies] and Cost Estimates. This Agreement pertains to the Facility[ies] and Cost Estimates identified on attached Schedule A [on Schedule A, for each Facility list the EPA and (abbreviation for State Agency) Identification Number, name, address, and the current Stack Closure and/or Long-Term Care Cost Estimates, or portions thereof, for which Financial Assurance is demonstrated by this Agreement].

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the “Fund,” for the benefit of EPA and [abbreviation for State Agency]. The

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<sup>1</sup> Any capitalized terms that are not otherwise defined in this Agreement shall have the meaning as set forth in the Consent Decree, or Appendices 2 and 10, as attached thereto.

Grantor and the Trustee intend that no Third Party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by EPA.

Section 4. Payment for Stack Closure and Long-Term Care. The Trustee shall make payments from the Fund only as directed in writing by the appropriate EPA Regional Administrator in accordance with Section 14. The Trustee shall provide for reimbursements to the Grantor or other persons from the Fund for the payment of the costs of Stack Closure and/or Long-Term Care of the Facility[ies] covered by this Agreement only as directed in writing by the appropriate EPA Regional Administrator. In addition, the Trustee shall refund to the Grantor only such amounts as the EPA Regional Administrator specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his/her duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the Facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution un-invested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust funds created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Semiannual Accounting. The Trustee shall, every six (6) months from the date of establishment of the Fund, furnish to the Grantor and to the appropriate EPA Regional Administrator (or the designee), a statement confirming the value of the Trust and a cumulative and calendar year accounting of the amount the Trustee has released from the Fund for reimbursement of Stack Closure and Long-Term Care expenditures. The Trustee shall furnish additional valuation statements and accountings of the released funds to the Grantor and to the appropriate EPA Regional Administrator, as instructed in writing by the EPA Regional Administrator. Any securities in the Fund shall be valued at market value as of no more than sixty (60) days prior to the Anniversary Date of establishment of the Fund or no more than sixty (60) days prior to a semi-annual accounting. The failure of the Grantor to object in writing to the Trustee within ninety (90) days after the statement has been furnished to the Grantor and the EPA Regional Administrator shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The Successor Trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the Successor Trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the Successor Trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a Successor Trustee or for instructions. The Successor Trustee shall specify the date on which it assumes administration of the trust in a writing sent to the Grantor, the EPA Regional Administrator, and the present Trustee by certified mail

ten (10) days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee.

(a) All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions.

(b) All orders, requests, and instructions by the EPA Regional Administrator to the Trustee shall be in writing, signed by the appropriate EPA Regional Administrator, unless otherwise indicated in instructions to the Trustee as signed by the EPA Regional Administrator. Initial instructions by the EPA Regional Administrator to the Trustee are attached as Exhibit B. New, revised or amended instructions by the EPA Regional Administrator to the Trustee will be dated and appended hereto in this Exhibit and shall be designated Exhibit B followed by a numeric designation (e.g., Exhibit B-1, Exhibit B-2). The Trustee shall act and shall be fully protected in acting in accordance with the EPA Regional Administrator's orders, requests, and instructions.

(c) The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EPA hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or EPA, except as provided for herein and found in Exhibit B.

Section 15. Notice of Payment. The Trustee shall notify the appropriate EPA Regional Administrator of payment to the Fund, by certified mail within ten (10) days following said payment to the Fund. The notice shall contain the name of the Grantor, the date of payment, the amount of payment and the current value of the Fund.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the appropriate EPA Regional Administrator, or by the Trustee and the appropriate EPA Regional Administrator if the Grantor ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the EPA Regional Administrator, or by the Trustee and the EPA Regional Administrator if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor, and/or the EPA Regional Administrator issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Idaho.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. Whenever the term “EPA Regional Administrator” is used, they shall be construed to include the term “or his/her designee.” The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written: The parties below certify that the wording of this Agreement is identical to the wording specified in Attachment D, Form 1 of Appendix 2 of the Consent Decree [*need to insert more information regarding the description of the CD, such as the name of the case, the case number, etc*].

[Signature of Grantor]

[Title]

Attest:

[Title]

[Seal]

[Signature of Trustee]

Attest:

[Title]

[Seal]



(2) The following is an example of the certification of acknowledgment which must accompany the trust agreement for a trust fund as specified in Appendix 2 of the Consent Decree.

State of

---

County of

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On this *[date]*, before me personally came *[owner or operator]* to me known, who, being by me duly sworn, did depose and say that she/he resides at *[address]*, that she/he is *[title]* of *[corporation]*, the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

[Signature of Notary Public]

*Simplot Don Plant Consent Decree  
Appendix 2, Attachment D, Form 1.A*

*Instructions:* *The trust agreement for a standby trust fund in connection with a letter of credit or surety bond, as specified in Appendix 2 of the Consent Decree, must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.*

**STANDBY TRUST AGREEMENT**

Trust Agreement, the “Agreement,” entered into as of [date] by and between [name of the owner or operator], a [name of State] [insert “corporation,” “partnership,” “association,” or “proprietorship”], the “Grantor,” and [name of corporate trustee], [insert “incorporated in the State of [---]” or “a national bank”], the “Trustee,”

Whereas, EPA has entered into a Consent Decree with [Defendant and the owner or operator of the Facility(ies)] requiring [Defendant and the owner or operator of the Facility(ies)] to provide Financial Assurance that funds will be available when needed for Stack Closure and/or Long-Term Care of its Facility[ies] covered under the Consent Decree [need to insert additional description of the Consent Decree].

Whereas, the Grantor has elected to establish a [insert letter of credit or surety bond] to provide all or part of such Financial Assurance for the Facility identified herein,

Whereas, the Grantor is creating this Standby Trust to satisfy the requirement that it create a standby trust in connection with its use of the [insert letter of credit or surety bond], and

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

Now, Therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:<sup>1</sup>

(a) The term “Grantor” means the owner or operator of the Facility who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term “Trustee” means the Trustee who enters into this Agreement and any Successor Trustee.

Section 2. Identification of Facility[ies] and Cost Estimates. This Agreement pertains to the Facility[ies] and Cost Estimates identified on attached Schedule A [on Schedule A, for each Facility list the EPA and (abbreviation for State Agency) Identification Number, name, address, and the current Stack System Closure and/or Long-Term Care Cost Estimates, or portions thereof, for which Financial Assurance is demonstrated by this Agreement]. Grantor demonstrates Financial Assurance through the [insert Financial

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<sup>1</sup> Any capitalized terms that are not otherwise defined in this Agreement shall have the meaning as set forth in the Consent Decree, or Appendices 2 and 10, as attached thereto.

*Mechanism*] and will fund this trust fund in accordance with the terms of that mechanism and Appendix 2 of the Consent Decree.

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of EPA and [*abbreviation for State Agency*]. The Grantor and the Trustee intend that no Third Party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto [*describing that the Fund is not presently funded but shall be funded by the financial assurance document used by the Grantor in accordance with the terms of that document*]. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by EPA.

Section 4. Payment for Stack System Closure and Long-Term Care. The Trustee shall make payments from the Fund only as directed in writing by the appropriate EPA Regional Administrator in accordance with Section 14. The Trustee shall provide for reimbursements to the Grantor or other persons from the Fund for the payment of the costs of Stack System Closure and/or Long-Term Care of the Facility[*ies*] covered by this Agreement only as directed in writing by the appropriate EPA Regional Administrator. In addition, the Trustee shall refund to the Grantor only such amounts as the EPA Regional Administrator specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his/her duties with respect to the Fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the federal or a state government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the federal or state government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust funds created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other

banking institution affiliated with the Trustee, to the extent insured by an agency of the federal or state government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee, and all other proper charges and disbursements of the Trustee shall be paid by the Grantor. To the extent not paid directly by the Grantor, and after notice to EPA of fees and charges not paid by the Grantor as required, such fees and charges can be paid from the Fund.

Section 10. Semiannual Accounting. The Trustee shall, every six (6) months from the date of funding of the Fund, furnish to the Grantor and to the appropriate EPA Regional Administrator (or the designee), a statement confirming the value of the Trust and a cumulative and calendar year accounting of the amount the Trustee has released from the Fund for reimbursement of Stack System Closure and Long-Term Care expenditures. The Trustee shall furnish additional valuation statements and accountings of the released funds to the Grantor and to the appropriate EPA Regional Administrator as instructed in writing by the EPA Regional Administrator. Any securities in the Fund shall be valued at market value as of no more than sixty (60) days prior to the Anniversary Date of establishment of the Fund or no more than sixty (60) days prior to a semi-annual accounting. The failure of the Grantor to object in writing to the Trustee within ninety (90) days after the statement has been furnished to the Grantor and the EPA Regional Administrator shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The Successor Trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the Successor Trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the Successor Trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of

the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a Successor Trustee or for instructions. The Successor Trustee shall specify the date on which it assumes administration of the Trust in a writing sent to the Grantor, the EPA Regional Administrator, and the present Trustee by certified mail ten (10) days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. Instructions to the Trustee.

(a) All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions.

(b) All orders, requests, and instructions by the EPA Regional Administrator to the Trustee shall be in writing, signed by the appropriate EPA Regional Administrator, unless otherwise indicated in instructions to the Trustee as signed by the EPA Regional Administrator. Initial instructions by the EPA Regional Administrator to the Trustee are attached as Exhibit B. New, revised or amended instructions by the EPA Regional Administrator to the Trustee will be dated and appended hereto in this Exhibit and shall be designated Exhibit B followed by a numeric designation (e.g., Exhibit B-1, Exhibit B-2, etc.). The Trustee shall act and shall be fully protected in acting in accordance with the EPA Regional Administrator's orders, requests, and instructions.

(c) The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EPA hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and EPA, except as provided for herein and found in Exhibit B.

Section 15. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the appropriate EPA Regional Administrator, or by the Trustee and the appropriate EPA Regional Administrator if the Grantor ceases to exist.

Section 16. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 15, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the EPA Regional Administrator, or by the Trustee and the EPA Regional Administrator if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 17. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor and the EPA

Regional Administrator issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 18. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Idaho.

Section 19. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. Whenever the terms “EPA Regional Administrator” is used, it shall be construed to include the term “or his/her designee.” The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness Whereof, the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written: The parties below certify that the wording of this Agreement is identical to the wording specified in Attachment D, Form 1.A of Appendix 2 of the Consent Decree [*need to insert more information regarding the description of the CD, such as the name of the case, the case number, etc.*].

[Signature of Grantor]

[Title]

Attest:

[Title]

[Seal]

[Signature of Trustee]

Attest:

[Title]

[Seal]

\* \* \*

The following is an example of the certification of acknowledgment that must accompany the trust agreement for a trust fund as specified in Appendix 2 of the Consent Decree.

State of

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County of

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On this *[date]*, before me personally came *[owner or operator]* to me known, who, being by me duly sworn, did depose and say that she/he resides at *[address]*, that she/he is *[title]* of *[corporation]*, the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation, and that she/he signed her/his name thereto by like order.

[Signature of Notary Public]



*Instructions: A surety bond guaranteeing payment into a trust fund, as specified in Appendix 2 of the Consent Decree, shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.*

[Letterhead of Bond Issuer]

**FINANCIAL GUARANTEE BOND**

Date Bond Executed: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Principal: [Legal name and business address of Defendant]

Type of organization: [Insert "individual," "joint venture," "partnership," or "corporation"]

State of incorporation: \_\_\_\_\_

Surety[ies]: [Name(s) and business address(es)]

EPA Identification Number, name, address, and Stack Closure and/or Long-Term Care amount(s) for each Facility guaranteed by this bond [indicate Stack Closure and/or Long-Term Care amounts separately]: \_\_\_\_\_

Total Penal Sum of Bond: \$ \_\_\_\_\_

Surety's Bond Number: \_\_\_\_\_

Know All Persons By These Presents, That we, the Principal and Surety[ies] hereto are firmly bound to EPA in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal, the named Defendant, entered into a Consent Decree, [insert description of the Consent Decree such as name of the case, the case number, etc.] with EPA pursuant to the Resource Conservation and Recovery Act ("RCRA"), as amended, to resolve civil claims by establishing injunctive relief under the Consent Decree;<sup>1</sup>

Whereas said Principal is required to provide Financial Assurance pursuant to Paragraph 26 of the Consent Decree for Stack Closure and Long-Term Care; and

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<sup>1</sup> Any capitalized terms that are not otherwise defined in this Financial Guarantee Bond shall have the meaning as set forth in the Consent Decree, or Appendices 2 and 10, as attached thereto.

Whereas said Principal shall establish a standby trust fund as is required when a financial guarantee bond (“surety bond” or “bond”) is used to provide such Financial Assurance:

Now, Therefore, the conditions of the obligation are such that if the Principal shall faithfully, before the beginning of Stack Closure and Long-Term Care [*or insert, as appropriate, either Stack Closure or Long-Term Care if the Financial Assurance provided is limited to one of the obligations*] of each Facility identified above, fund the standby trust fund in the amount(s) identified above for the Facility,

Or, if the Principal shall fund the standby trust fund in such amount(s) within 15 days after a final order to begin Stack Closure and Long-Term Care [*or insert, as appropriate, either Stack Closure or Long-Term Care if the Financial Assurance provided is limited to one of the obligations*] is issued by EPA or a U.S. district court or other court of competent jurisdiction,

Or, if the Principal shall provide alternate Financial Assurance, as specified in Appendix 2 to the Consent Decree and obtain EPA’s written approval of such assurance, within 90 days after the date notice of cancellation is received by both the Principal and EPA from the Surety[*ies*], then the obligation of the Surety or Sureties, as applicable, shall be null and void; otherwise it is to remain in full force and effect.

The Surety[*ies*] shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above. Upon notification by EPA that the Principal has failed to perform as guaranteed by this bond, the Surety[*ies*] shall place funds in the amount guaranteed for the Facility[*ies*] into the standby trust fund as directed by EPA.

The liability of the Surety[*ies*] shall not be discharged by any payment or succession of payments hereunder, unless and until such payments or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety[*ies*] hereunder exceed the amount of said penal sum [*insert the following text if more than one Surety is covering the Financial Assurance obligation: “as specified below for each individual Surety”*].

The Surety[*ies*] may cancel the bond by sending notice of cancellation by certified mail to the Principal, EPA and [*insert abbreviation for State Agency*], provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the Principal and EPA, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety[*ies*], provided, however, that no such notice shall become effective until the Surety[*ies*] receive[*s*] written authorization for termination of the bond by EPA.

In Witness Whereof, The Principal and Surety[*ies*] have executed this Financial Guarantee Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety[*ies*] and that the wording of this surety bond is identical to the wording specified in Appendix 2, Attachment D, Form 2 of the Consent Decree for a Financial Guarantee Bond.

**FOR THE PRINCIPAL:**

Date: \_\_\_\_\_

By [*signature*]: \_\_\_\_\_

Printed name: \_\_\_\_\_

Title: \_\_\_\_\_

Corporate seal: \_\_\_\_\_

**FOR THE CORPORATE SURETY(IES):**

[*Name and Address*]

State of incorporation: \_\_\_\_\_

Liability limit: \$ \_\_\_\_\_

Date: \_\_\_\_\_

By [*signature*]: \_\_\_\_\_

Printed name: \_\_\_\_\_

Title: \_\_\_\_\_

Corporate seal: \_\_\_\_\_

[*For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for the Surety above.*]

Bond premium: \$ \_\_\_\_\_

*Instructions: A performance bond guaranteeing performance, as specified in Appendix 2 of the Consent Decree, shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.*

[Letterhead of Bond Issuer]

**PERFORMANCE BOND**

Date Bond Executed: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Principal: [Legal name and business address of Defendant]

Type of organization: [Insert "individual," "joint venture," "partnership," or "corporation"]

State of incorporation: \_\_\_\_\_

Surety[ies]: [Insert name(s) and business address(es)]

EPA Identification Number, name, address, and Stack Closure and/or Long-Term Care amount(s) for each Facility guaranteed by this performance bond [indicate Stack Closure and/or Long-Term Care amounts separately]: \_\_\_\_\_

Total Penal Sum of Bond: \$ \_\_\_\_\_

Surety's Bond Number: \_\_\_\_\_

Know All Persons By These Presents, That we, the Principal and Surety[ies] hereto are firmly bound to EPA in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

Whereas said Principal, the named Defendant, entered into a Consent Decree, [insert description of the Consent Decree such as name of the case, the case number, etc.] with EPA pursuant to the Resource Conservation and Recovery Act ("RCRA"), as amended, to resolve civil claims by establishing injunctive relief under the Consent Decree;<sup>1</sup>

Whereas said Principal is required to provide Financial Assurance pursuant to Paragraph 26 of the Consent Decree for Stack Closure and Long-Term Care, and

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<sup>1</sup> Any capitalized terms that are not otherwise defined in this Performance Bond shall have the meaning as set forth in the Consent Decree, or Appendices 2 and 10, as attached thereto.

Whereas said Principal shall establish a standby trust fund as is required when a surety bond is used to provide such Financial Assurance:

Now, Therefore, the conditions of this obligation are such that if the Principal shall faithfully perform Stack Closure, whenever required to do so, of each Facility for which this bond guarantees Stack Closure, in accordance with the Closure Plan and other requirements of the Consent Decree as such Closure Plan and Consent Decree may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended,

And if the Principal shall faithfully perform Long-Term Care, of each Facility for which this bond guarantees Long-Term Care, in accordance with the Closure Plan and other requirements of the Consent Decree as such Closure Plan and Consent Decree may be amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations may be amended,

Or, if the Principal shall provide alternate Financial Assurance as specified in Appendix 2 to the Consent Decree, and obtain the EPA's written approval of such assurance, within 90 days after the date notice of cancellation is received by both the Principal and EPA from the Surety[ies], then this obligation shall be null and void, otherwise it is to remain in full force and effect. The Surety[ies] shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

If EPA issues a Work Takeover Notice pursuant to Section VII (Work Takeover) of the Consent Decree stating that the Principal has failed to perform Stack Closure in accordance with the Closure Plan and Consent Decree for a Facility for which this bond guarantees performance of Stack Closure, and the Principal fails within thirty (30) Days, or such additional time that EPA agrees may be reasonably needed, to remedy the circumstances giving rise to EPA's issuance of such notice, the Surety[ies] shall either perform Stack Closure in accordance with the Closure Plan and the Consent Decree or place the Stack Closure amount guaranteed for the Facility into the standby trust fund as directed by the EPA.

If EPA issues a Work Takeover Notice pursuant to Section VII (Work Takeover) of the Consent Decree stating that the Principal has failed to perform Long-Term Care in accordance with the Closure Plan and Consent Decree for a Facility for which this bond guarantees performance of Long-Term Care, and the Principal fails within thirty (30) Days, or such additional time that EPA agrees may be reasonably needed, to remedy the circumstances giving rise to EPA's issuance of such notice, the Surety[ies] shall either perform Long-Term Care in accordance with the Closure Plan and the Consent Decree or place the Long-Term Care amount guaranteed for the Facility into the standby trust fund as directed by the EPA.

Upon notification by EPA that the Principal has failed to provide alternate Financial Assurance as required by Appendix 2 to the Consent Decree, and obtain written approval of such assurance from EPA during the 90 days following receipt by both the Principal and EPA of a notice of cancellation of the bond, the Surety[ies] shall place funds in the amount guaranteed for the Facility[ies] into the standby trust fund as directed by EPA.

The Surety[ies] hereby waive[s] notification of amendments to the Consent Decree, Initial Closure Plan, Permanent Closure Plan, permits, applicable laws, statutes, rules, and regulations and agree[s] that no such amendment shall in any way alleviate its [their] obligation on this bond.

The liability of the Surety[ies] shall not be discharged by any payment or succession of payments hereunder, unless and until such payments or payments shall amount in the aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety[ies] hereunder exceed the amount of said penal sum.

The Surety[ies] may cancel the bond by sending notice of cancellation by certified mail to the Principal and EPA, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and EPA, as evidenced by the return receipts.

The Principal may terminate this bond by sending written notice to the Surety[ies], provided, however, that no such notice shall become effective until the Surety[ies] receive[s] written authorization for termination of the bond by EPA.

In Witness Whereof, The Principal and Surety[ies] have executed this Performance Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety[ies].

**FOR THE PRINCIPAL:**

Date: \_\_\_\_\_

By [signature]: \_\_\_\_\_

Printed name: \_\_\_\_\_

Title: \_\_\_\_\_

Corporate seal: \_\_\_\_\_

**FOR THE CORPORATE SURETY(IES):**

[*Name and Address*]

State of incorporation: \_\_\_\_\_

Liability limit: \$ \_\_\_\_\_

Date: \_\_\_\_\_

By [*signature*]: \_\_\_\_\_

Printed name: \_\_\_\_\_

Title: \_\_\_\_\_

Corporate seal: \_\_\_\_\_

[*For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for the Surety above.*]

Bond premium: \$ \_\_\_\_\_

*Instructions: A letter of credit guaranteeing payment into a trust fund, as specified in Appendix 2 of the Consent Decree, shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.*

**IRREVOCABLE STANDBY LETTER OF CREDIT<sup>1</sup>**

Regional Administrator, Region \_\_, EPA

Dear Sir(s) or Madam(s): We hereby establish our Irrevocable Standby Letter of Credit No.\_\_\_\_ in your favor, at the request and for the account of [*Defendant's, name and address, the owner and/or operator of the Facility(ies)*] up to the aggregate amount of [*insert amount in words*] U.S. dollars \$[*insert amount in numbers*], available upon presentation by you of

(1) your sight draft, bearing reference to this letter of credit No. \_\_\_\_, and

(2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant to Consent Decree [*case name/docket information for consent decree*] entered into pursuant to the Resource Conservation and Recovery Act of 1976, as amended."

This letter of credit is effective as of [*date*] and shall expire on [*date at least 1 year later*], but such expiration date shall be automatically extended for a period of [*at least 1 year*] on [*date*] and on each successive expiration date, unless, at least 120 Days before the current expiration date, we notify both you and [*Defendant's name, the owner and/or operator of the Facility(ies)*] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight drafts for 120 Days after the date of receipt by both you and [*Defendant's name, the owner and/or operator of the Facility(ies)*], as shown on the signed return receipts.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the entire amount of the draft directly into the Trust Fund (Account No.\_\_\_\_) created by the Trust Agreement entered by [*insert Defendant's name, the owner and/or operator of the Facility(ies)*], dated \_\_\_\_ 20\_\_, in accordance with your instructions.

[*Signature(s) and title(s) of official(s) of issuing institution*] [*Date*]

This credit is subject to [*insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published and copyrighted by the International Chamber of Commerce," or "the Uniform Commercial Code"*].

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<sup>1</sup> Any capitalized terms that are not otherwise defined in this Irrevocable Standby Letter of Credit shall have the meaning as set forth in the Consent Decree, or Appendices 2 and 10, as attached thereto.



U.S. Environmental Protection Agency  
Regional Administrator  
Region \_\_

[*Insert State Agency designation*]  
Director

Attention: [*Specify EPA Office and State Office*]

Dear Sir(s) or Madam(s):

In accordance with Appendix 2 of Consent Decree [*case name/docket information for consent decree*] we have established Irrevocable Standby Letter of Credit No. \_\_\_\_\_ issued by [*name of issuing institution*] on [*issuing date*] in the amount of [*insert amount in words*] U.S. dollars (\$[*insert amount in numbers*]) for the following Facility[ies]:

- [*Insert Facility Name*]
- [*EPA Id Number*]
- [*Facility Address*]
- [*Coverage for Stack Closure and/or Long-Term Care*]

I certify that the letter of credit provider is a federally insured financial institution. I certify that the wording of the letter of credit is identical to the wording specified in Attachment D, Form 4, of Appendix 2, of the Consent Decree [*case name/docket information for consent decree*].

Sincerely,

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[*Insert Name*]  
Chief Financial Officer  
[*Insert Company/Defendant Name*]

*Instructions: A certificate of insurance, as specified in Appendix 2 of the Consent Decree, shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.*

**CERTIFICATE OF INSURANCE FOR  
STACK CLOSURE AND/OR LONG-TERM CARE<sup>1</sup>**

Name and Address of Insurer:  
(herein called the "Insurer"): \_\_\_\_\_  
Name and Address of Insured:  
(herein called the "Insured"): \_\_\_\_\_

Facilities Covered: *[List for each Facility: The EPA Identification Number, name, address, and the amount of insurance for Stack Closure and/or the amount of insurance for Long-Term Care (these amounts for all Facilities covered must total the face amount shown below).]*

Face Amount: \_\_\_\_\_  
Policy Number: \_\_\_\_\_  
Effective Date: \_\_\_\_\_

The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified above to provide financial assurance for *[insert "Phosphogypsum Stack System Closure" or "Stack Closure and Long-Term Care" or "Long-Term Care"]* for the Facility*[ies]* identified above. The Insurer further warrants that such policy conforms in all respects with the requirements of *Paragraph 10.d of Section III, Appendix 2 of the Consent Decree (including Consent Decree name and docket information)*, and as such requirements were constituted on the date shown immediately below. It is agreed that any provision of the policy inconsistent with such requirements of *Paragraph 10.d of Section III, Appendix 2 of the Consent Decree* is hereby amended to eliminate such inconsistency.

Whenever requested by the EPA Regional Administrator[s] of the U.S. Environmental Protection Agency ("EPA), the Insurer agrees to furnish the EPA Regional Administrator[s] of the EPA a duplicate original of the policy listed above, including all endorsements thereon.

I hereby certify that the wording of this certificate is identical to the wording specified in *Attachment D, Form 5 of Appendix 2 of the Consent Decree* and as such requirements were constituted on the date shown immediately below.

*[Authorized signature for Insurer]* \_\_\_\_\_  
*[Name of person signing]* \_\_\_\_\_  
*[Title of person signing]* \_\_\_\_\_  
Signature of witness or notary: \_\_\_\_\_  
*[Date]* \_\_\_\_\_

<sup>1</sup> Any capitalized terms that are not otherwise defined in this Certificate for Insurance shall have the meaning as set forth in the Consent Decree, or Appendices 2 and 10, as attached thereto.

*Instructions: A surety bond guaranteeing payment into a trust fund for Third-party Liability, as specified in Appendix 2 of the Consent Decree, shall be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted.*

[Letterhead of Bond Issuer]

### **PAYMENT BOND**

Surety Bond No. [Insert number]

Parties [Insert name and address of owner or operator], Principal, incorporated in [Insert State of incorporation] of [Insert city and State of principal place of business] and [Insert name and address of surety company(ies)], Surety Company(ies), of [Insert surety(ies) place of business].

EPA Identification Number, name, and address for each Facility guaranteed by this bond: \_\_\_\_\_

	Sudden Accidental Occurrences	Nonsudden Accidental Occurrences
Penal Sum Per Occurrence	[insert amount]	[insert amount]
Annual Aggregate	[insert amount]	[insert amount]

Purpose: This is an agreement between the Surety(ies) and the Principal under which the Surety(ies), its(their) successors and assignees, agree to be responsible for the payment of claims against the Principal for bodily injury and/or property damage to Third Parties caused by ["sudden" and/or "nonsudden"] accidental occurrences arising from operations of the Facility or group of Facilities in the sums prescribed herein; subject to the governing provisions and the following conditions.

Governing Provisions:

The Principal (the named Defendant) entered into a Consent Decree, [*insert description of the Consent Decree such as name of the case, the case number, etc.*] with EPA pursuant to the Resource Conservation and Recovery Act ("RCRA"), as amended, to resolve civil claims by establishing injunctive relief under the Consent Decree.<sup>1</sup>

The Principal is required to provide Financial Assurance pursuant to Paragraph 26 of the Consent Decree for Third-party Liability.

<sup>1</sup> Any capitalized terms that are not otherwise defined in this Financial Guarantee Bond shall have the meaning as set forth in the Consent Decree, or Appendices 2 and 10, as attached thereto.

Conditions:

(1) The Principal is subject to the applicable governing provisions that require the Principal to have and maintain liability coverage for bodily injury and property damage to Third Parties caused by ["sudden" and/or "nonsudden"] accidental occurrences arising from operations of the Facility or group of Facilities. Such obligation does not apply to any of the following:

(a) Bodily injury or property damage for which [insert Principal] is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages that [insert Principal] would be obligated to pay in the absence of the contract or agreement.

(b) Any obligation of [insert Principal] under a workers' compensation, disability benefits, or unemployment compensation law or similar law.

(c) Bodily injury to:

(1) An employee of [insert Principal] arising from, and in the course of, employment by [insert Principal]; or

(2) The spouse, child, parent, brother or sister of that employee as a consequence of, or arising from, and in the course of employment by [insert Principal]. This exclusion applies:

(A) Whether [insert Principal] may be liable as an employer or in any other capacity; and

(B) To any obligation to share damages with or repay another person who must pay damages because of the injury to persons identified in paragraphs (1) and (2).

(d) Bodily injury or property damage arising out of the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle or watercraft.

(e) Property damage to:

(1) Any property owned, rented, or occupied by [insert Principal];

(2) Premises that are sold, given away or abandoned by [insert Principal] if the property damage arises out of any part of those premises;

(3) Property loaned to [insert Principal];

(4) Personal property in the care, custody or control of [insert Principal];

(5) That particular part of real property on which [insert Principal] or any contractors or subcontractors working directly or indirectly on behalf of [insert Principal] are performing operations, if the property damage arises out of these operations.

(2) This bond assures that the Principal will satisfy valid Third-party Liability claims, as described in condition 1.

(3) If the Principal fails to satisfy a valid Third-party Liability claim, as described above, the Surety(ies) becomes liable on this bond obligation.

(4) The Surety(ies) shall satisfy a Third-party Liability claim only upon the receipt of one of the following documents:

(a) Certification from the Principal and the Third-Party claimant(s) that the liability claim should be paid. The certification must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

#### Certification of Valid Claim

The undersigned, as parties [insert name of Principal] and [insert name and address of Third-Party claimant(s)], hereby certify that the claim of bodily injury and/or property damage caused by a [sudden or nonsudden] accidental occurrence arising from operating [Principal's] Facility should be paid in the amount of \$[ ].

[Signature]

Principal

[Notary] Date

[Signature(s)]

Claimant(s)

[Notary] Date;

or,

(b) A valid final court order establishing a judgment against the Principal for bodily injury or property damage caused by sudden or nonsudden accidental occurrences arising from the operation of the Principal's Facility or group of Facilities.

(5) In the event of combination of this bond with another mechanism for liability coverage, this bond will be considered [insert "primary" or "excess"] coverage.

(6) The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of the bond. In no event shall the obligation of the Surety(ies) hereunder exceed the amount of said annual aggregate penal sum, provided that the Surety(ies) furnish(es) notice

to the Regional Administrator forthwith of all claims filed and payments made by the Surety(ies) under this bond.

(7) The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal and the USEPA Regional Administrator for Region [Region #], provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the Principal and the Regional Administrator, as evidenced by the return receipt.

(8) The Principal may terminate this bond by sending written notice to the Surety(ies) and to the EPA Regional Administrator(s) of the EPA Region(s) in which the bonded Facility(ies) is (are) located.

(9) The Surety(ies) hereby waive(s) notification of amendments to applicable laws, statutes, rules and regulations and agree(s) that no such amendment shall in any way alleviate its (their) obligation on this bond.

(10) This bond is effective from [insert date] (12:01 a.m., standard time, at the address of the Principal as stated herein) and shall continue in force until terminated as described above.

In Witness Whereof, the Principal and Surety(ies) have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in Appendix 2, Attachment D, Form 6 of the Consent Decree.

PRINCIPAL

[Signature(s)]

[Name(s)]

[Title(s)]

[Corporate Seal]

CORPORATE SURETY[IES]

[Name and address]

State of incorporation:

Liability Limit: \$

[Signature(s)]

[Name(s) and title(s)]

[Corporate seal]

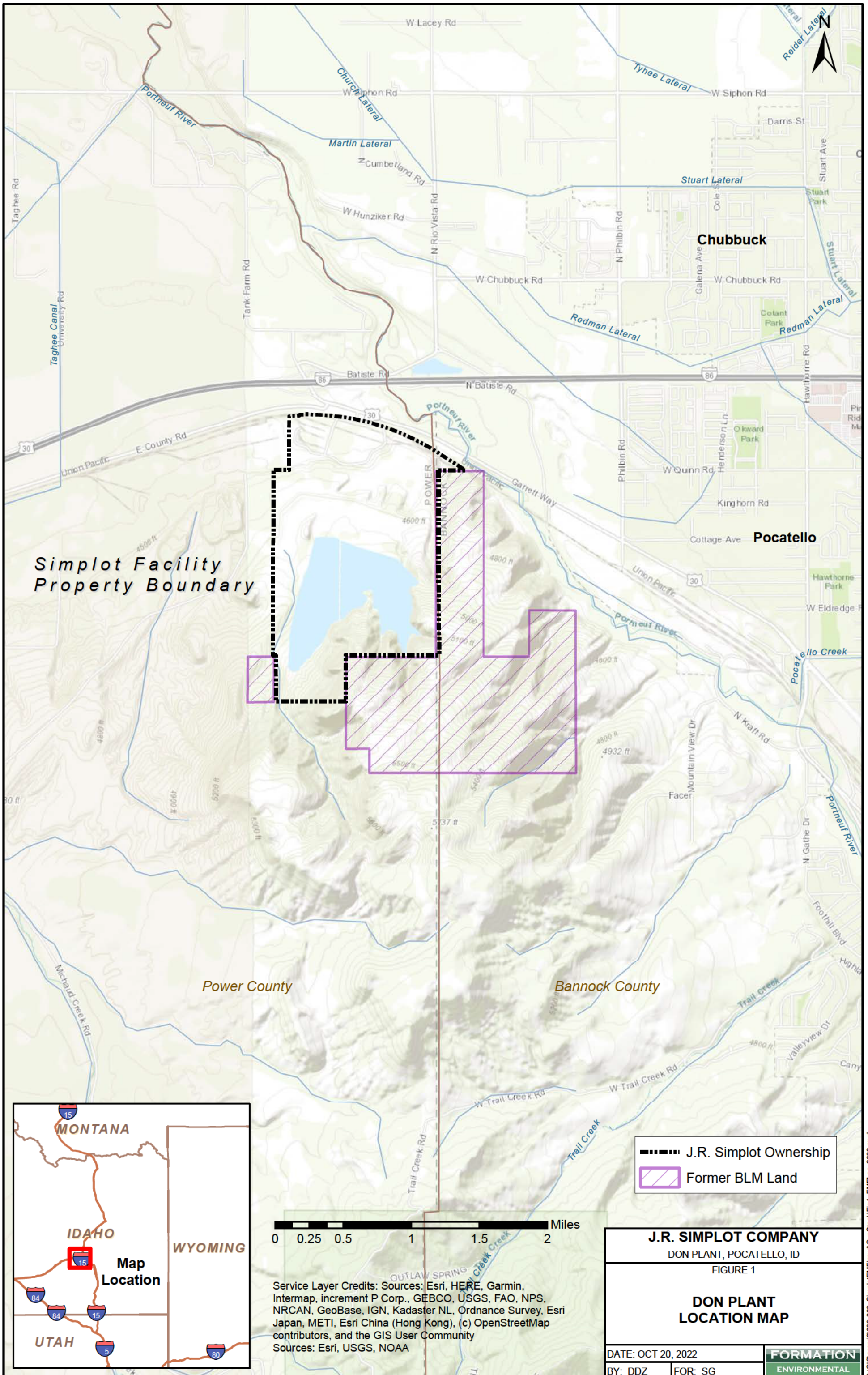
[For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.]

Bond premium: \$

## Appendix 3

### Site Maps of the Simplot Don Plant Facility





*Simplot Facility Property Boundary*

Power County

Bannock County

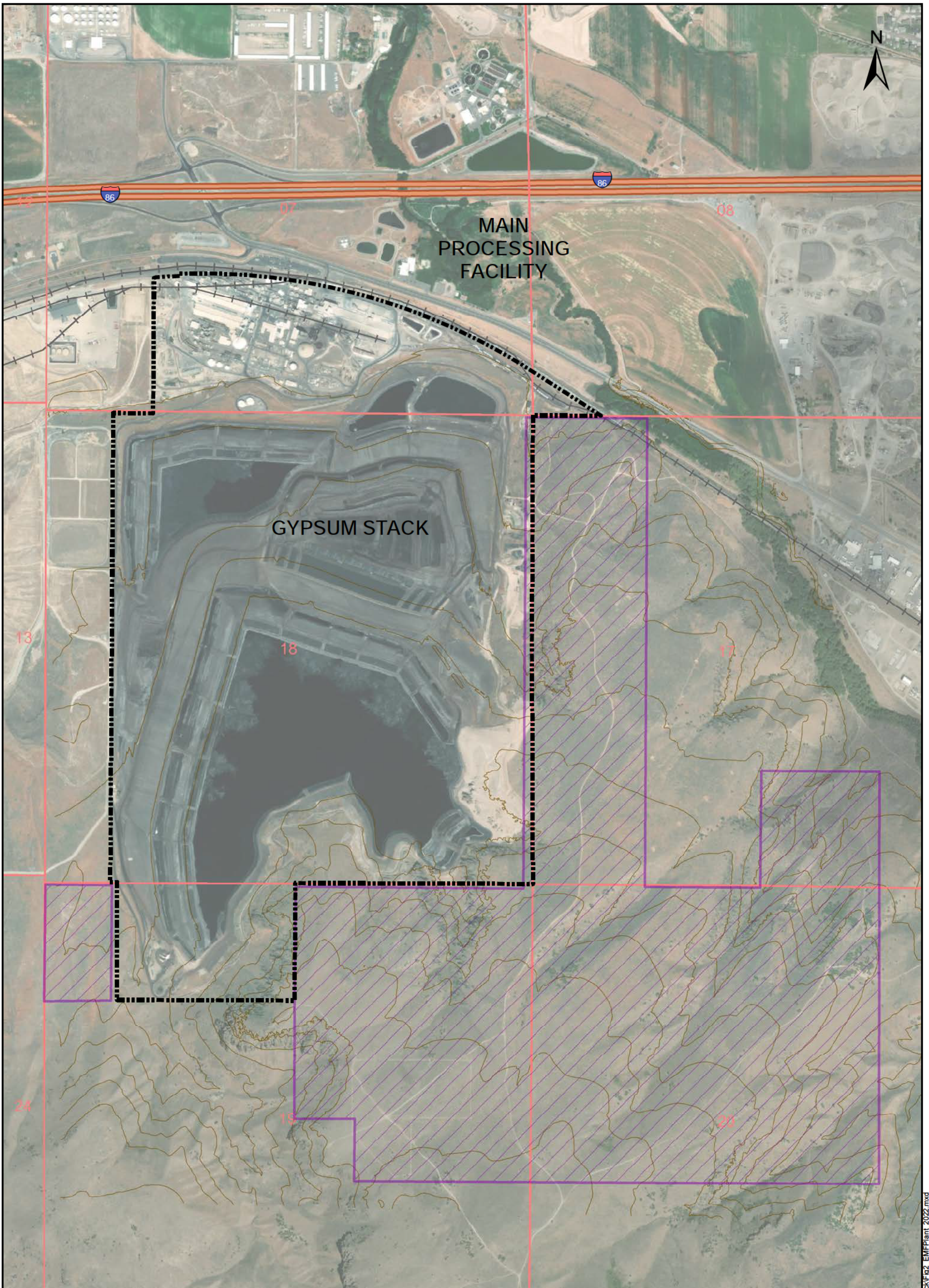
- J.R. Simplot Ownership
- Former BLM Land



Service Layer Credits: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community  
 Sources: Esri, USGS, NOAA

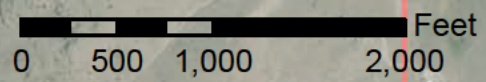


<b>J.R. SIMPLOT COMPANY</b>	
DON PLANT, POCA TELLO, ID	
FIGURE 1	
<b>DON PLANT LOCATION MAP</b>	
DATE: OCT 20, 2022	<b>FORMATION</b>
BY: DDZ	ENVIRONMENTAL
FOR: SG	



**Legend**

- PLSS Section
- Index Contour 100 feet
- J.R. Simplot Ownership
- ▨ Former BLM Land



Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  
 Compiled by the Bureau of Land Management (BLM), National Operations Center (NOC), OC-530.

<b>J.R. SIMPLOT COMPANY</b>	
DON PLANT, POCA TELLO, ID	
FIGURE 2	
<b>DON PLANT</b>	
DATE: OCT 20, 2022	<b>FORMATION</b>
BY: DDZ	<b>ENVIRONMENTAL</b>
FOR: SG	

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Service Layer Credits:  
Simplot August 2022.

<p><b>J.R. SIMPLOT COMPANY</b> DON PLANT, POCA TELLO, ID</p>	
<p>FIGURE 3</p>	
<p><b>J.R. SIMPLOT</b> <b>DON PLANT</b> <b>MAIN PROCESSING FACILITY</b></p>	
<p>DATE: OCT 20, 2022</p>	<p><b>FORMATION</b></p>
<p>BY: DDZ</p>	<p>FOR: SG</p>
<p><b>ENVIRONMENTAL</b></p>	

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## Appendix 4

### Facility Report

NOTE - REDACTED FOR ASSERTED  
CONFIDENTIAL BUSINESS INFORMATION



# Appendix 4 Facility Report

Don Plant

Final Report

November 11, 2022



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## I. Introduction

All capitalized terms not otherwise defined in this Facility Report will have the meaning set forth in the Consent Decree or in Appendix 10.

### A. Purpose

The purposes of this Facility Report are to:

1. Identify Simplot's Upstream Operations, Animal Feed Ingredient Production (AFIP), Downstream Operations, Mixed-Use air pollution control devices (APCDs), and Mixed-Use Units at the Facility.
2. Identify certain units associated with Downstream Operations from which the cleaning wastes may be managed with wastes from Upstream Operations due to the particular configuration of the Facility (Grandfathered Units).
3. Identify compliance projects set forth in Section VI (Compliance Projects). Compliance Projects of this Facility Report include the Acid Value Recovery System and the Granulation Recovery System.
4. Identify certain units associated with Simplot's Acid Value Recovery System and Acid Value Recovery Units. Cleaning wastes or other materials from these units will be recovered into Upstream Operations as designated in this Facility Report or to the Acid Value Recovery System in accordance with Section VI (Compliance Projects).
5. Identify certain units associated with Simplot's SPA Recovery Units. Cleaning wastes or other materials from these units will be recovered directly in the Granulation process as designated in this Facility Report or to the Acid Value Recovery System in accordance with Section VI (Compliance Projects).
6. Identify certain Downstream Units associated with Simplot's Granulation Recovery System and Granulation Recovery System Units. Cleaning wastes or other materials from these units will be recovered in the Granulation process as designated in this Facility Report, to the Granulation Recovery System in accordance with Section VI (Compliance Projects), or sent to the wastewater reuse facility for land application.<sup>1</sup>

---

<sup>1</sup> The wastewater reuse facility, which incorporates an elementary neutralization unit, is part of a land application system that allows utilization of nutrients from portions of the facility. The ENU was installed





7. Address phosphoric acid product spills and leaks in accordance with Section VII (Containment of Phosphoric Acid Production Related Spills and Leaks).
8. Identify categories of future equipment installations, materials from which may be managed with materials from Upstream Operations when meeting the conditions set forth in Section VIII (Proposed Phosphoric Acid Production Related Operations), Section IX (Non-Phosphoric Acid Proposed Projects) and Section X (Authorized Future Installations).

Hazardous wastes generated from the production of sulfuric acid, washes related to the transport of sulfuric acid to the phosphoric acid plant, and wastes generated from the cleaning of sulfuric acid transportation related equipment are not within the scope of this Report. Also excluded from the scope is Upstream process equipment containing naturally occurring radioactive material (NORM). Such process equipment (examples include phosphate filter cloths, piping, etc.) shall be disposed of in phosphogypsum stacks in accordance with 40 CFR § 61.202.

#### B. Overview

A major purpose of the Facility Report is to specify how Simplot will handle processing materials from designated units at the Facility.

For the units designated as part of AFIP, Upstream, or Downstream Operations or identified as Mixed-Use Units, Grandfathered Units SPA Recovery Units, Acid Value Recovery Units, or Granulation Recovery Units, cleaning wastes or other materials will be handled as described below.

1. Cleaning wastes or other materials generated from Upstream Operations/ Mixed Use Units/AFIP/Grandfathered Units
  - a. Cleaning Solution Materials
    - i. If Non-Hazardous Aqueous Cleaning Solution (NHACS), Phosphogypsum Stack System Wastewater, and/or Process Wastewater have been used to clean these units, then the cleaning wastes or other materials from these units may be input to

as part of a 2002 Consent Order with IDEQ. The land application of wastewater is permitted through IDEQ.



Upstream Operations or discharged to Phosphogypsum Stack System.

- ii. Following commencement of operations of the Acid Value Recovery System, if Acid Value Recovery System Effluent is used to clean these units, then the cleaning wastes or other materials from these units may be input to the Acid Value Recovery System for use in Upstream Operations in accordance with Section VI (Compliance Projects), except in the case of an Acid Value Recovery System process upset (see below).
- iii. Following commencement of operations of the Acid Value Recovery System, if Simplot does not utilize the Acid Value Recovery System to recover cleaning wastes or other materials identified in (ii) above, or if any cleaning solutions other than those listed in (i) & (ii) above are used to clean these units, then Simplot must make a RCRA hazardous waste determination, and if the wastes are hazardous, then Simplot shall manage the materials in accordance with RCRA Requirements.

b. Scrubber Materials

Process materials from phosphoric acid and AFIP operations (i.e., scrubber effluent) may be input to Upstream Operations or discharged to the Phosphogypsum Stack System. Scrubber cleaning materials must be managed as described in 1.a. above.

c. Spills and Leaks

These are handled in accordance with Appendix 5.A (Minimizing and Addressing Spills and Leaks) and Section VII (Containment of Phosphoric Acid Production Related Spills and Leaks). Spills and leaks of phosphoric acid, sulfuric acid<sup>2</sup>, nitric acid<sup>3</sup>, or Acid Value Recovery System effluent in Semi-Segregable, Containable

<sup>2</sup> This is only for incidental spills and leaks of sulfuric acid in the phosphoric acid manufacturing area. In the phosphoric acid manufacturing area, the infrastructure is set up to manage phosphoric acid materials. For other spills and leaks of sulfuric acid, where they can be segregated, the acid will be recovered for use or managed according to RCRA Requirements.

<sup>3</sup> This is only for incidental spills and leaks of nitric acid in the super phosphoric acid manufacturing area. In the super phosphoric acid manufacturing area, the infrastructure is set up to manage phosphoric acid materials. For other spills and leaks of nitric acid, where they can be segregated, the acid will be recovered for use or managed according to RCRA Requirements.



Impervious, or Predominately Containable Areas, as shown in Figures 10-12, may be returned to a tank with similar material or input to the Acid Value Recovery System for use in Upstream Operations in accordance with Section VI (Compliance Projects). Spills and leaks of Process Wastewater, Phosphogypsum Stack System Wastewater or NHACS in Containable Impervious or Predominately Containable Areas may be discharged to the Phosphogypsum Stack System.

2. Materials Generated from Acid Value Recovery System Operations

a. Acid Value Recovery System Units

Prior to commencement of the Acid Value Recovery System, if NHACS, Process Wastewater, or Phosphogypsum Stack System Wastewater are used to clean Acid Value Recovery System Units, then the cleaning wastes or other materials from these units may continue to be managed consistent with Simplot's Consolidated Materials Management Practices. Following commencement of operation of the Acid Value Recovery System, SPA secondary solids (filter solids) can be used in the specific Upstream/Mixed-Use Units identified in Section IV.E of this Facility Report or in Granulation. Following commencement of operation of the Acid Value Recovery System, PPA secondary solids (filter solids) can be used in the specific Upstream Units identified in Section IV.G of this Facility Report. Following commencement of operations of the Acid Value Recovery System, if NHACS, Process Wastewater, Phosphogypsum Stack System Wastewater, or Acid Value Recovery System effluent are used to clean SPA Recovery Units or Acid Value Recovery System Units, then the materials from these units may be input to the Acid Value Recovery System for use in Upstream Operations in accordance with Section VI (Compliance Projects).

b. Acid Value Recovery Tank(s)

Influents to the Acid Value Recovery Tank(s) are limited to the following: (i) cleaning wastes or other materials generated from the use of NHACS, Phosphogypsum Stack System Wastewater, Process Wastewater, and Acid Value Recovery System Effluent; (ii) materials from SPA Recovery Units; and (iii) spills and leaks per 1.c above. Acid Value Recovery Tank(s) operation is described in Section VI.A.2



(Project Operations) of this Facility Report. Acid Value Recovery Tank(s) Effluent may be input to Upstream Operations or used for cleaning of the Acid Value Recovery System Units or SPA Recovery Units and returned to the Acid Value Recovery System. The Acid Value Recovery Tank(s) itself is designated an Acid Value Recovery System Unit, and therefore for materials generated from cleaning the Acid Value Recovery Tank(s) itself, see 2.a. above.

c. Process Upsets

In the event of a process upset that prevents the recovery of cleaning solutions via the Acid Value Recovery System, then Simplot (1) must not discharge to the Phosphogypsum Stack System any Acid Value Recovery System effluent used in cleaning those units affected by the process upset; and (2) must make a RCRA hazardous waste determination of any cleaning wastes or other materials generated from Acid Value Recovery System Units and/or SPA Recovery Units, and if the wastes are hazardous, then Simplot shall manage such wastes in accordance with RCRA Requirements.

3. Materials Generated from Granulation Recovery System Tank(s) and Units

a. Granulation Recovery System Units

b. If NHACS, Process Wastewater, Phosphogypsum Stack System Wastewater, or Granulation Recovery System effluent are used to clean Granulation Recovery System Units, then the cleaning wastes or other materials from these units may be input to the Granulation Recovery System for use in Downstream Operations in accordance with Section VI (Compliance Projects) and/or to the wastewater reuse facility. If the cleaning wastes or other materials are non-hazardous, then these wastes or other materials can be sent to the Phosphogypsum Stack.

c. Granulation Recovery Tank(s)

Influents to the Granulation Recovery Tank(s) are limited to the following: (i) Phosphogypsum Stack System Wastewater, Process Wastewater, NHACS, and Granulation Recovery System effluent; and



(ii) spills and leaks of phosphoric acid, sulfuric acid<sup>4</sup>, or Granulation Recovery System effluent in Containable Impervious Areas. Granulation Recovery Tank(s) operation is described in Section VI.B. 2 (Project Operations) of this Facility Report. The Granulation Recovery Tank(s) itself is designated a Granulation Recovery System Unit, and therefore for cleaning wastes or other materials generated from cleaning the Granulation Recovery Tank(s) itself, see 3.a. above.

d. Process Upsets

In the event of a process upset that prevents the recovery of cleaning solutions via the Granulation Recovery System, then Simplot must make a hazardous waste determination of cleaning wastes or other materials generated from those units affected by the process upset, and if the wastes are hazardous, then Simplot shall manage the wastes in accordance with RCRA Requirements. If the cleaning wastes or other materials are non-hazardous, then they can be sent to the wastewater reuse facility.

4. Materials generated from Downstream Operations only

If materials from Downstream Operations are not sent to the Granulation Recovery System, Acid Value Recovery System for recovery and reuse, or to the wastewater reuse facility, then a hazardous waste determination will be made, and if the wastes are hazardous, then Simplot shall manage the wastes in accordance with RCRA Requirements.

---

<sup>4</sup> This is only for incidental spills and leaks of sulfuric acid in the Granulation manufacturing areas. In the Granulation manufacturing areas, the infrastructure is set up to manage phosphoric acid and ammonium phosphate materials. For other spills and leaks of sulfuric acid, where they can be segregated, the acid will be recovered for use and managed according to RCRA Requirements.



## II. Background<sup>5</sup>

Simplot's Don Plant Facility ("Facility") produces both liquid and granular fertilizer products. 69% phosphoric acid (commonly known as Super Phosphoric Acid or "SPA"), Purified Phosphoric Acid ("PPA"), 23.5P, and Ammonium Poly-Phosphate ("APP") are produced as liquid products. MAP and 40 Rock™ granular product are manufactured in two production trains designated as Granulation #1 and #2. Granulation #1 also produces 16-20-0 granular product. Ammonia and phosphoric acid are the primary reactants for MAP and 16-20-0 and are consumed in the production of ammoniated fertilizers on-site. Calcium phosphate animal feed products (commonly known as Simphos 21P and Simphos 18.5P) are produced in a single production train designated as Granulation #3. Diatomaceous earth ("DE"), limestone, and phosphoric acid are the primary reactants for the animal feed products.

Phosphoric acid is produced by the reaction of phosphate rock with sulfuric acid in one reactor. The reaction yields phosphoric acid and Phosphogypsum. Phosphogypsum is filtered from the phosphoric acid on four belt filters, slurried with Process Wastewater in a gypsum launder (a large pipe where the gypsum solids are sluiced and flow to the gypsum slurry tanks via gravity flow) and two gypsum slurry tanks and the resultant slurry is pumped to the lined Phosphogypsum Stack System. Because the production of phosphoric acid is a water-intensive process and water is used throughout the process (e.g., as acid dilution, filtration wash, evaporators, condensers, and as a pipe and tank cleaning agent), approximately 200 million to 400 million gallons of Process Wastewater are constantly stored in and circulating throughout the Facility's Phosphogypsum Stack System and the phosphoric acid production process.

Construction and design of the Phosphogypsum Stack and Process Wastewater Decant Ponds includes a synthetic 16 oz. non-woven polypropylene geotextile or prepared gypsum beneath a 60 mil high density polyethylene liner. The Facility is authorized to discharge specific industrial wastewater streams to permitted farmland under a wastewater reuse permit with the State of Idaho.

---

<sup>5</sup> This Background Section is provided solely for informative purposes and is not a definitive or exhaustive description of the Facility or its operations.



### III. Products at Simplot Don Plant

The Facility manufactures phosphoric acid, which can be used to make both granular and liquid fertilizer products. Five primary concentrations of phosphoric acid, as described below, are used to produce: 40 Rock™, MAP, 16-20-0, animal feed, or liquid fertilizer products:

- 28% phosphoric acid is routed to 40 Rock™, MAP, or 16-20-0 production and to further concentration steps;
- 42% phosphoric acid is routed to 40 Rock™, MAP, or 16-20-0 production, to clarification and evaporation steps to make a 55% purified phosphoric acid, and to further concentration steps;
- 52% clarified phosphoric acid can be routed to either 40 Rock™, MAP, or 16-20-0. 52% phosphoric acid can be evaporated to a 69% phosphoric acid, or SPA. 52% clarified phosphoric acid can also be sold directly as Merchant Grade Acid (MGA);
- 54% clarified phosphoric acid and 69% phosphoric acid from the Simplot Rock Springs facility can be routed to animal feed production, liquid fertilizer products, or to 40 Rock™, MAP, or 16-20-0 production.



#### IV. Phosphoric Acid, PPA, and SPA Production – Phosphoric Acid Plant

The Facility's phosphoric acid plant ("Phosphoric Acid Plant") consists of two filtration buildings, two evaporation buildings/areas, and six clarification and storage areas/buildings. One clarification area and two storage areas have a synthetic lining system under the concrete consisting a 60-mil high density polyethylene liner. The production areas are predominantly contained with concrete and/or acid brick floors that are sloped toward sumps to collect runoff and any incidental spills that may occur. The associated sumps in all of the areas are made of reinforced concrete and/or acid brick with a synthetic lining system composed of high-density polyethylene, polypropylene, or stainless steel, with the exception of the 52% Clarifier and Storage Tank and 42% Storage Tank area (#8 Sump) that does not have a synthetic lining system. Process Wastewater flows are collected and transferred to the Phosphogypsum Stack System via high density polyethylene lines at a combined flow rate of approximately 10,000 gallons per minute.

##### A. Phosphoric Acid Plant Standard Acid Flow Configuration

The Phosphoric Acid Plant produces five main concentrations of phosphoric acid for use in fertilizer manufacturing: 28%  $P_2O_5$ <sup>6</sup>, 42%  $P_2O_5$ , 52%  $P_2O_5$ , 55%  $P_2O_5$ , 69%  $P_2O_5$ <sup>7</sup>. Figure 3 shows the overall production process at the Facility. Deviations from the standard acid flow configuration are necessary on periodic short-term intervals.

The Facility produces phosphoric acid in one reactor designated as the Digester. Prior to 28% clarification in the MRC and/or 19B clarifier(s) (TA040, TA042), the acid flow is as follows:

##### Digester:

Post-reactor, unclarified 28% acid is pumped to the # 1, #2, #3, and/or #4 Belt Filters (FP002, FP003, FP004, FP032) to the 1<sup>st</sup> Filtrate Tank at each filter

<sup>6</sup> All concentrations of  $P_2O_5$  are approximate and fluctuate slightly.

<sup>7</sup> Note that although the terms  $P_2O_5$  and phosphoric acid ( $H_3PO_4$ ) are used interchangeably, the concentrations are not interchangeable. Simplot manufactures phosphoric acid; however, in this document, we refer to the concentration of the acid in terms of  $P_2O_5$  concentration, rather than phosphoric acid concentration.  $P_2O_5$  concentration can be converted to an approximate concentration of phosphoric acid by multiplying by 1.3808. Phosphoric acid is converted to an approximate concentration of  $P_2O_5$  by multiplying by 0.7242.





(TA009, TA013, TA017, TA223) then to the MRC and/or 19B (TA040, TA042).

1. 28% Acid Processed to 28% Clarification

- 28% acid from the belt filter(s) (FP002, FP003, FP004, FP032) is pumped to the MRC Clarifier and/or 19B Clarifier (TA040, TA042).
- Underflow (solids) from both of the 28% clarifier(s) (TA040, TA042) are pumped to the digester for acid recovery.
- Overflow (clarified acid) from MRC Clarifier (TA040) is gravity-fed to Tank 50 (TA044). Overflow (clarified acid) from the 19B Clarifier (TA042) is pumped to Tank 50 and/or Tank 51 (TA041). 28% clarified acid can be pumped from Tank 50 (TA044) to Tank 51 (TA041) for additional storage. Tank 50 and/or Tank 51 can be pumped to 19B Clarifier (TA042) for additional storage.

2. Clarified 28% Acid Processed to 42% Clarification or Feedstock to Granulation

- Evaporator(s) #3, #4, #6, #8, #9, #10, #11, and/or #12 (EV003, EV004, EV006, EV008, EV009, EV010, EV011, EV016) are fed from the 28% storage tank(s) (TA044, TA041) and/or the 19B Clarifier (TA042). The 28% storage tank(s) also feed 28% acid to the Digester for hot acid return.
- The 28% storage tank(s) feed 28% acid to Tank 55 (TA043) and/or Tank 57 (TA200) via the 28% Transfer Line for dilution of Rock Springs sourced phosphoric acid and super phosphoric acid.
- 28% acid is fed from the 28% storage tank(s) (TA044, TA041) to granulation via the 28% Transfer Line to the G1 & G2 28% Acid Transfer Line.
- 42% acid from evaporator(s) #3, #4, #6, #8, #9, #10, #11 and/or #12 (EV003, EV004, EV006, EV008, EV009, EV010, EV011, EV016) is pumped to the 22 Clarifier (TA179) and/or



to the 19B Clarifier (TA042). 42% acid from evaporator(s) #3, #4, #6, #8, #9, #10, and/or #12 (EV003, EV004, EV006, EV008, EV009, EV010, EV016) can also be pumped to the PPA Acid Stabilization Tank (TA204).

- Underflow from the 22 Clarifier (TA179) is pumped to the 28% clarifier(s) (TA040, TA042).

### 3. Clarified 42% Acid Processed to 52% Clarification or Feedstock to Granulation or PPA

- Overflow (clarified 42% acid) is pumped from the 22 Clarifier (TA179) to Tank 55 (TA043) for storage, to evaporator(s) #3, #4, #6, #8, #9, #10, #11, and/or #12 (EV003, EV004, EV006, EV008, EV009, EV010, EV011, EV016) for concentration to 52% acid, and/or to PPA Acid Stabilization Tank (TA204).
- Tank 55 (TA043) also receives material from Receiving Tank 7 (TA192) and/or Simplot-Rock Springs sourced 54% P<sub>2</sub>O<sub>5</sub> phosphoric acid and super phosphoric acid (SPA 69% P<sub>2</sub>O<sub>5</sub>) that is pumped direct from rail cars to the tank.
- From Tank 55 (TA043) 42% acid is pumped to #3, #4, #6, #8, #9, #10, #11, and/or #12 Evaporator (EV003, EV004, EV006, EV008, EV009, EV010, EV011, EV016) for concentration to 52% acid; and/or is pumped to granulation via the G1 42% Transfer Line and/or the G2 42% Transfer Line.
- Concentrated 52% acid is pumped from evaporator(s) #3, #4, #6, #8, #9, #10, #11, and/or #12 (EV003, EV004, EV006, EV008, EV009, EV010, EV011, EV016) to the 54 Clarifier (TA048).
- Underflow (solids) from the 54 Clarifier (TA048) is pumped to the Tank 56 and/or Tank 57 (TA136, TA200). The underflow from the 54 Clarifier (TA048) can also be pumped to the MRC Clarifier (TA040) or 19B Clarifier (TA042).
- Overflow (clarified 52% acid) from the 54 Clarifier (TA048) is pumped to Tank 53 and/or Tank 52 (TA046, TA047).



4. 52% Storage to 52% Acid Users via A & B 52% Transfer Line(s)

- Tank 52 (TA047) and/or Tank 53 (TA046) provides 52% acid to rail car and truck load out facilities for shipment, to the Super Phosphoric Acid (SPA) process via the A 52% Acid Transfer Line and/or the B 52% Acid Transfer Line, or to Tank 55 (TA043), Tank 56 (TA136) and/or Tank 57 (TA200) via the IPC Transfer Line.
- A supplemental ingredient is periodically added to Tank 52 (TA047) to assist with SPA production.

5. Tank 56 (TA136) and/or Tank 57 (TA200)

- Solids from Tank 56 (TA136) and/or Tank 57 (TA200) are pumped to the MRC Clarifier (TA040), the Digester, and/or to granulation via the G1 Muds Transfer Line and/or the G2 Muds Transfer Line. Material from Tank 56 (TA136) and Tank 57 (TA200) can be transferred amongst those 2 tanks.
- Tank 56 (TA136) and/or Tank 57 (TA200) also receives material from Receiving Tank 7 (TA192) and/or Simplot-Rock Springs sourced 54% P<sub>2</sub>O<sub>5</sub> phosphoric acid and super phosphoric acid (SPA 69% P<sub>2</sub>O<sub>5</sub>) that is pumped direct from rail cars to the tank.

B. Alternate Acid Flow Configuration

Note: The Facility has the capability to route around all clarifiers and storage tanks within the phosphoric acid process on a temporary basis, except for the following Upstream Operations units:

- Digester
- Belt Filter(s)
- Gypsum Launder
- Evaporator(s) #3, #4, #6, #8, #9, #10, #11 or #12

When cleaning and/or maintenance of the 22 Clarifier, the 19B Clarifier is converted from 28% acid service to 42% acid clarification. Similarly, when



cleaning and/or maintenance of the 54 Clarifier, the 19B Clarifier can be converted to 52% service.

### C. Phosphoric Acid Transfer to SPA and Downstream Operations

#### 1. Acid Transfer between the Phosphoric Acid Plant and Granulation

The Facility has four primary transfer lines that serve to transport clarified 28% and/or 42% phosphoric acid from the Phosphoric Acid Plant to the Granulation Plants. The G1 and/or G2 42% Transfer Lines transport acid from Tank 55 (TA043) to the Granulation #1 and/or #2 Plant. The G1 & G2 28% Acid Transfer Line transports 28% acid from the 28% Transfer Line to various locations in the granulation processes.

All transfer lines described above are cleaned with cleaning solution to remove precipitated solids and scale to maintain acceptable pressure levels and acid flow rates. The locations of the transfer lines are illustrated in Figure 7. The estimated line lengths and cleaning frequencies are listed in Table 1.

#### 2. Muds & 52% Acid Transfer between the Phosphoric Acid Plant and Granulation

The Facility has three primary transfer lines that serve to transport phosphoric acid muds streams and/or 52% phosphoric acid from the Phosphoric Acid Plant to the Granulation Plants. The G1 Muds Transfer Line transports muds from Tank 56 (TA136) and/or Tank 57 (TA200) to the Granulation #1 Plant. The G2 Muds Transfer Line transports muds from Tank 56 (TA136) and/or Tank 57 (TA200) to the Granulation #2 Plant. The Tank 52 Transfer Line can transport 52% acid to the G1 Muds Transfer Line and/or the G2 Muds Transfer Line for use in the Granulation Plants. As an alternative method to get 52% acid to the Granulation Plants, 52% acid may be transported from Tank 53 (TA046) to Tank 56 (TA136), Tank 57 (TA200), and/or Tank 55 (TA043) through the IPC Transfer Line.

All transfer lines described above are cleaned with cleaning solution to remove precipitated solids and scale to maintain acceptable pressure levels and acid flow rates. The locations of the transfer lines are illustrated in Figure 8. The estimated line lengths and cleaning frequencies are listed in Table 2.



### 3. Acid Transfer between the Phosphoric Acid Plant, Truck and Rail Loadout, and SPA Evaporator Feed Tank

The Facility has two primary transfer lines that serve to transport 52% phosphoric acid from the Phosphoric Acid Plant to the SPA Evaporator Feed Tank (TA141). The A and/or B 52% Transfer Line transports 52% acid from Tank 53 (TA046) and/or Tank 52 (TA047) to the Truck and/or Rail Loadout and/or to the SPA Evaporator Feed Tank (TA141).

All transfer lines described above are cleaned with cleaning solution to remove precipitated solids and scale to maintain acceptable pressure levels and acid flow rates. The locations of the transfer lines are illustrated in Figure 9. The estimated line lengths and cleaning frequencies are listed in Table 3.

### D. Railcar Cleaning Operations

The Facility washes phosphoric acid railcars using a circulating wash loop from the Car Wash Tank (TA307) to the railcar and back to the Car Wash Tank. A nonhazardous aqueous solution is used as make-up water into the Car Wash Tank. When the tank level or wash solution quality requires, the wash material is pumped to Tank 51 (TA041), Tank 52 (TA047), Tank 56 (TA136), MRC Clarifier (TA040), the SPA Recovery System, and/or the Acid Value Recovery System for recovery.

### E. 69% Acid - SPA Standard Process Configuration

The SPA process described below is illustrated in Figure 4.

SPA #1, #2, and/or #3 Evaporator(s) (EV012, EV014, EV013) are utilized to further concentrate 52% acid to 69% acid. After evaporation, the 69% acid is aged and filtered to produce SPA product. The acid flow is as follows:

1. 52% processed to 69%
  - From the Tank 52 and Tank 53 (TA047, TA046), 52% acid is pumped to the Evaporator Feed Tank (TA141) via the A & B 52% Acid Transfer Lines.
  - 52% acid from the Evaporator Feed Tank (TA141) is pumped to the SPA #1, #2, and/or #3 Evaporator (EV012, EV014, EV013) for concentration to 69% acid.



- 69% acid is pumped from SPA #1, #2, and/or #3 Evaporators (EV012, EV014, EV013) to the Oxidation Reactor (TA244) or 1<sup>st</sup> Stage Aging Tank (TA189) should the Oxidation Reactor be out of service.

## 2. 69% acid polishing, aging, and filtration

- Polishing of the 69% acid occurs in the Oxidation Reactor (TA244).
- 69% acid overflows from the Oxidation Reactor (TA244) to the 1<sup>st</sup> Stage Aging Tank (TA189).
- There are 2 aging tanks and a filter feed tank that are run in series and are labeled 1<sup>st</sup> Stage Aging Tank (TA189), 2<sup>nd</sup> Stage Aging Tank (TA175), and Filter Feed Tank (TA143). The phosphoric acid is allowed to 'age' by slow cooling and slight agitation which crystallizes impurities in the 69% acid by post-precipitation
- The solids that were precipitated out in the aging tanks are removed in the SPA #1 Filter Press and/or SPA #2 Filter Press (FP051, FP052).
- The solids filtered out of the 69% acid with the SPA #1 Filter Press and/or SPA #2 Filter Press (FP051, FP052) are removed from the filter cloths and collected in the SPA Re-Pulp Tank (TA145). The solids still contain approximately 50% P<sub>2</sub>O<sub>5</sub> value, and are mixed with a non-hazardous aqueous solution, Process Wastewater, and/or SPA Recovery Unit effluent, to suspend the solids into a pumpable slurry.
- The re-pulp tank slurry is pumped to Tank 57 (TA200), Tank 56 (TA136), SPA Evaporator Feed Tank (TA141), MRC Clarifier (TA040), 19B Clarifier (TA042) and/or the Digester. Tank 56 (TA136) or Tank 57 (TA200) stores the phosphate rich slurry and is pumped to Granulation #1, Granulation #2, MRC Clarifier, and/or the Digester for recovery.

## 3. SPA Product to Storage and Shipment









[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



## I. SPA Deflo Standard Process Configuration

The SPA Deflo process described below is illustrated in Figure 6.

The Facility's SPA Defluorination plant ("SPA Deflo") is entirely contained within and shares some equipment (pumps, piping, #2 Evaporator) with the SPA Plant. The SPA Deflo Plant currently produces a defluorinated phosphoric acid at a concentration of 55%  $P_2O_5$  (54%- 56%). The acid flow is as follows:

### 1. Railcar unloading to SPA Deflo Mix Tank

- Simplot-Rock Springs sourced super phosphoric acid (SPA 69%  $P_2O_5$ ) is pumped from rail cars to the SPA Deflo Mix Tank (TA158).
- A supplemental ingredient slurry is added to the SPA Deflo Mix Tank (TA158) and the acid concentration is reduced to 38%.

### 2. SPA Deflo Mix Tank to SPA #2 Evaporator

- Acid from the SPA Deflo Mix Tank is pumped to the SPA #2 Evaporator (EV014).
- Concentrated defluorinated phosphoric acid at 62%  $P_2O_5$  is pumped from the SPA #2 Evaporator (EV014) to the SPA Deflo Dilution Tank (TA159).

### 3. SPA Deflo Dilution Tank to shipping

- Water is added to the SPA Deflo Dilution Tank (TA159) to reduce the acid concentration to 55%. 55% defluorinated



phosphoric acid is circulated and cooled and pumped to the #6 Tank (TA191) for storage.

- 55% defluorinated phosphoric acid in #6 Tank (TA191) is circulated continuously through the #6 Tank Recirculation Header and back to #6 Tank (TA191).
- 55% defluorinated phosphoric acid is loaded into trucks and rail cars from the #6 Tank Recirculation Header.

#### J. Alternate SPA Deflo Flow Configuration

Note: The Facility has the capability to route around all equipment within the SPA Deflo process on a temporary basis, except for the following units:

- SPA Deflo Mix Tank
- SPA #2 Evaporator
- SPA Deflo Dilution Tank
- #6 Tank

#### K. DE Deflo Standard Process Configuration

The Facility's Diatomaceous Earth Defluorinated Acid ("DE Deflo") plant is a defluorination process that reduces fluorine content of 54% phosphoric acid from Simplot's Rock Springs facility for use in animal feed production or shipped via railcar as defluorinated phosphoric acid. The acid is offloaded from railcars into a tank and then pumped over to the defluorination process and/or pumped to granulation feed acid for production of granulated ammonium phosphate products. The acid flow is as follows:

##### 1. Railcar unloading to Batch Tanks

- Simplot-Rock Springs sourced 54%  $P_2O_5$  phosphoric acid and super phosphoric acid (SPA 69%  $P_2O_5$ ) are pumped from rail cars to the Receiving Tank 7 (TA192). The Receiving Tank 7 (TA192) can also be bypassed, allowing railcars to be pumped to the East and/or West Batch Tanks (TA231, TA232).
- Acid from Receiving Tank 7 is heated to increase the acid temperature and then pumped to the East or West Batch Tank (TA231, TA232).

##### 2. Batch Tanks to Granulation 3 Process



- Acid from the East or West Batch Tank (TA231, TA232) is circulated and heated and transferred to the DE Mix Tank (TA234) where Diatomaceous Earth is added to the phosphoric acid to promote volatilization of fluoride.
- Once the desired P/F ratio is achieved, the acid is then pumped to either the Deflo Product Cooler (CJ023) to reduce temperature and to Tank 2 (TA157) for storage or the Feed Acid Tank (TA061) for feed to the Granulation 3 process to produce Calcium Phosphate Animal Feed Ingredients (AFI).
- Water from the Sump Tank (TA062) and/or Deflo Product Cooler (CJ023) can be added to the Feed Acid Tank (TA061).

### 3. Granulation 3 Dry Side Process

- From the Feed Acid Tank (TA061) the acid goes to the High Speed Mixer (MX046) to mix with limestone and water from the Entoleter Scrubber Tank (TA184) and/or a nonhazardous aqueous solution.
- From the High Speed Mixer (MX046) the process liquid is then added to recycled granular product in the Blunger (BN001).
- Granular product is then sent to a dryer and screening equipment for final product preparation and sizing.

#### L. Alternate DE Deflo and Granulation 3 Flow Configuration

Note: The Facility has the capability to route around all tanks and equipment within the DE Deflo and Granulation 3 process on a temporary basis, except for the following units:

- East or West Batch Tank
- DE Mix Tank
- High Speed Mixer
- Blunger



## V. Configuration Equipment Designations

### A. Upstream Units

The following processes, tanks, and associated equipment used in the production, concentration, transport, and storage of 28% and 42% phosphoric acid, and the concentration of 42% phosphoric acid to 52% phosphoric acid, serve only Upstream Operations:

#### 1. Tanks

##### a. Reaction System

- i. Digester (DI001)
- ii. West Flash Cooler (CJ002)
- iii. East Flash Cooler (CJ001)
- iv. West Condenser Seal Tank (TA051)
- v. East Condenser Seal Tank (TA050)
- vi. Center Seal Tank (TA053)
- vii. East & West Flash Cooler Vacuum System (SR002, SR003, PU004, PU005, CO001, CO002, CO003, CO004)

##### b. Filtration System

- i. #1 Belt Filter (FP002)
- ii. #1 Filter 1<sup>st</sup> Filtrate Tank (TA009)
- iii. #1 Filter 2<sup>nd</sup> Filtrate Tank (TA010)
- iv. #1 Filter 3<sup>rd</sup> Filtrate Tank (TA011)
- v. #1 Filter 4<sup>th</sup> Filtrate Tank (TA012)
- vi. #1/#2 Belt Filter Spray Pit
- vii. #1 Filter Vacuum System (SP100, SR042, PU001)
- viii. #2 Belt Filter (FP003)



- ix. #2 Filter 1<sup>st</sup> Filtrate Tank (TA013)
- x. #2 Filter 2<sup>nd</sup> Filtrate Tank (TA014)
- xi. #2 Filter 3<sup>rd</sup> Filtrate Tank (TA015)
- xii. #2 Filter 4<sup>th</sup> Filtrate Tank (TA016)
- xiii. #2 Filter Vacuum System (SP101, SR043, PU002)
- xiv. #3 Belt Filter (FP004)
- xv. #3 Filter 1<sup>st</sup> Filtrate Tank (TA017)
- xvi. #3 Filter 2<sup>nd</sup> Filtrate Tank (TA018)
- xvii. #3 Filter 3<sup>rd</sup> Filtrate Tank (TA019)
- xviii. #3 Filter 4<sup>th</sup> Filtrate Tank (TA020)
- xix. #3 Belt Filter Spray Pit
- xx. #3 Filter Vacuum System (SP102, SR044, PU003)
- xxi. #4 Belt Filter (FP032)
- xxii. #4 Filter 1<sup>st</sup> Filtrate Tank (TA223)
- xxiii. #4 Filter 2<sup>nd</sup> Filtrate Tank (TA224)
- xxiv. #4 Filter 3<sup>rd</sup> Filtrate Tank (TA225)
- xxv. #4 Filter 4<sup>th</sup> Filtrate Tank (TA226)
- xxvi. #4 Belt Filter Spray Pit
- xxvii. #4 Filter Vacuum System (SP103, SR040, PU020)
- xxviii. Blend Tank (TA398)
- xxix. Flash Cooler Condenser Pump Tank (TA038)
- xxx. East Gypsum Repulp Tank (TA399)
- xxxi. West Gypsum Repulp Tank (TA400)
- xxxii. West Booster Station Tank (TA373)



- xxxiii. East Booster Station Tank (TA374)
- c. Clarification and Storage of 28% Phosphoric Acid
  - i. MRC Clarifier (TA040)
  - ii. 19B Clarifier (TA042)
  - iii. Tank 50 (TA044)
  - iv. Tank 51 (TA041)
- d. Concentration of 28% Phosphoric Acid to 42% and 52% Phosphoric Acid
  - i. Evaporator #2 Barometric Condenser (CO038)
  - ii. Evaporator #2 Hotwell (TA418)
  - iii. Evaporator #3 (EV003)
  - iv. Evaporator #3 Heat Exchanger (HE003)
  - v. Evaporator #3 Barometric Condenser (CO030)
  - vi. Evaporator #3 Hotwell (TA410)
  - vii. Evaporator #4 (EV004)
  - viii. Evaporator #4 Heat Exchanger (HE004)
  - ix. Evaporator #4 Barometric Condenser (CO031)
  - x. Evaporator #4 Hotwell (TA411)
  - xi. Evaporator #6 (EV006)
  - xii. Evaporator #6 Heat Exchanger (HE006)
  - xiii. Evaporator #6 Barometric Condenser (CO032)
  - xiv. Evaporator #6 Hotwell (TA412)
  - xv. Evaporator #8 (EV008)
  - xvi. Evaporator #8 Heat Exchanger (HE008)



- xvii. Evaporator #8 Barometric Condenser (CO034)
- xviii. Evaporator #8 Hotwell (TA413)
- xix. Evaporator #9 (EV009)
- xx. Evaporator #9 Heat Exchanger (HE009)
- xxi. Evaporator #9 Barometric Condenser (CO035)
- xxii. Evaporator #9 Hotwell (TA414)
- xxiii. Evaporator #10 (EV010)
- xxiv. Evaporator #10 Heat Exchanger (HE010)
- xxv. Evaporator #10 Barometric Condenser (CO036)
- xxvi. Evaporator #10 Hotwell (TA415)
- xxvii. Evaporator #11 (EV011)
- xxviii. Evaporator #11 Heat Exchanger (HE011)
- xxix. Evaporator #11 Barometric Condenser (CO037)
- xxx. Evaporator #12 (EV016)
- xxxi. Evaporator #12 Heat Exchanger (HE135)
- xxxii. Evaporator #12 Barometric Condenser (CO026)
- xxxiii. Evaporator #12 Hotwell (TA417)
- xxxiv. Hot Pit #1 (HP002)
- xxxv. Hot Pit #2 (HP001)
- xxxvi. Cold Pit (CT020)
- xxxvii. Cooling Tower #1 (CT002)
- xxxviii. Cooling Tower #2 (CT003)
- xxxix. Cooling Tower #3 (CT004)
- xl. Cooling Tower #4 (CT005)





- xli. Cooling Tower #5 (CT006)
- xlii. Cooling Tower #6 (CT007)
- xliii. Cooling Tower #7 (CT008)
- xliv. Cooling Tower #8 (CT009)
- xlv. 1-3 Cooling Tower Basin (CT017)
- xlvi. 4-6 Cooling Tower Basin (CT018)
- xlvii. 7&8 Cooling Tower Basin (CT019)
- e. Clarification of 42% Phosphoric Acid
  - i. 22 Clarifier (TA179)
- f. Clarification of 52% Phosphoric Acid
  - i. 54 Clarifier (TA048)

## 2. Transfer Lines

All lines connecting the equipment listed above is considered Upstream Operations.

## 3. Air Pollution Control Devices (APCD)

### a. Digester Scrubber System

The Digester Scrubber System circulates process water to scrub fumes from the phosphoric acid process ("Phosphoric Acid Process") reactor and ancillary equipment. Make-up to the system is provided by Process Wastewater, Extraction Well Water, Fresh Water, and/or SPA Effluent. Blowdown from the system is sent to the Phosphogypsum Stack System.

The following equipment comprises the Digester Scrubber System:

- i. Digester Scrubber (SR030)
- ii. Digester Scrubber Launder
- iii. Digester Scrubber Fan (BL0016)



iv. PAP 400 & Belt Filter Scrubber Stack (SK001)

The Digester Scrubber evacuates fumes from the following processes, tanks, and associated equipment in the Phosphoric Acid Plant:

Name	Asset #	Designation
Digester	DI001	Upstream
East Condenser Seal Tank	TA050	Upstream
West Condenser Seal Tank	TA051	Upstream
Center Seal Tank	TA053	Upstream
East Vacuum Pump Seal Tank		Upstream
West Vacuum Pump Seal Tank		Upstream

B. Mixed Use Units

The following processes, tanks, and associated equipment in the Phosphoric Acid Plant are Mixed-Use Units:

1. Tanks

- a. Tank 55 (TA043)
- b. Tank 56 (TA136)
- c. Tank 57 (TA200)
- d. #1 IPC (TA109)
- e. #2 IPC (TA110)

2. Transfer Lines

- a. Transfer lines from Tank 57 (TA200) and/or Tank 56 (TA136) to MRC Clarifier (TA040) and/or the Digester.
- b. IPC Transfer Line
- c. Transfer lines from Receiving Tank 7 to Tank 7 Heater
- d. Rock Springs sourced phosphoric acid railcar/truck unloading to Receiving Tank 7
- e. Transfer to Tank 55 (TA043), Tank 56 (TA136), and/or Tank 57 (TA200) from Receiving Tank 7 or Rock Springs sourced phosphoric acid railcar/truck unloading.



- f. 28% Transfer Line
3. Air Pollution Control Devices (APCD)
- a. Belt Filter Scrubber System

The Belt Filter Scrubber System circulates process water to scrub fumes from specific units within the Phosphoric Acid Process and the PPA process ("PPA Process"). Make-up to the system is provided by Extraction Well Water and/or Fresh Water. Blowdown from the system is sent to the Digester Scrubber System.

The following equipment comprises the Belt Filter Scrubber System:

- i. Belt Filter Scrubber (SR004)
- ii. Belt Filter Scrubber Recycle Tank (TA203)
- iii. Belt Filter Scrubber Duct Spray Tank (TA059)
- iv. Belt Filter Scrubber Fan (BL018)
- v. PAP 400 & Belt Filter Scrubber Stack (SK001)

The Belt Filter Scrubber System evacuates fumes from the following processes, tanks, and associated equipment in the Phosphoric Acid Plant:

Name	Asset #	Designation
#1 Filter	FP002	Upstream
#1 Filter 1 <sup>st</sup> Filtrate Tank	TA009	Upstream
#1 Filter 2 <sup>nd</sup> Filtrate Tank	TA010	Upstream
#1 Filter 3 <sup>rd</sup> Filtrate Tank	TA011	Upstream
#1 Filter 4 <sup>th</sup> Filtrate Tank	TA012	Upstream
#2 Filter	FP003	Upstream
#2 Filter 1 <sup>st</sup> Filtrate Tank	TA013	Upstream
#2 Filter 2 <sup>nd</sup> Filtrate Tank	TA014	Upstream
#2 Filter 3 <sup>rd</sup> Filtrate Tank	TA015	Upstream
#2 Filter 4 <sup>th</sup> Filtrate Tank	TA016	Upstream
#3 Filter	FP004	Upstream
#3 Filter 1 <sup>st</sup> Filtrate Tank	TA017	Upstream
#3 Filter 2 <sup>nd</sup> Filtrate Tank	TA018	Upstream
#3 Filter 3 <sup>rd</sup> Filtrate Tank	TA019	Upstream
#3 Filter 4 <sup>th</sup> Filtrate Tank	TA020	Upstream
#4 Filter	FP032	Upstream
#4 Filter 1 <sup>st</sup> Filtrate Tank	TA223	Upstream
#4 Filter 2 <sup>nd</sup> Filtrate Tank	TA224	Upstream





v. Tank Farm Scrubber Duct Spray Tank (TA058)

The Tank Farm Scrubber System evacuates fumes from the following processes, tanks, and associated equipment in the Phosphoric Acid Plant:

Name	Asset #	Designation
[REDACTED]	[REDACTED]	[REDACTED]
MRC Clarifier	TA040	Upstream
22 Clarifier	TA179	Upstream
19B Clarifier	TA042	Upstream
Tank 50	TA044	Upstream
Tank 51	TA041	Upstream
Tank 52	TA047	Acid Value Recovery
#1 Wash Water Tank	TA222	Acid Value Recovery
Flash Cooler Condenser Pump Tank	TA038	Upstream
Tank Farm Scrubber Duct Spray Tank	TA058	IHCD System

**\*\*Confidential Business Information**

C. Grandfathered Units

The following units serve Downstream Operations but are not feasibly segregated from Upstream Operations. The cleaning wastes from these units may be managed with wastes from Upstream Operations. Three exceptions would be cleaning wastes from the [REDACTED], [REDACTED], which are managed in the Acid Value Recovery System, as described in Section IV.G of this Facility Report. Other materials from Grandfathered units will be managed to Upstream Operations for recovery. [REDACTED], which will report into the Process Wastewater flowing through the Evaporator #2 Barometric Condenser. This material will eventually enter the process water cooling system (currently the Reclaim Cooling Towers) and the phosphogypsum system. **\*\*Confidential Business Information\*\***

1. PPA Tanks & Equipment **\*Confidential Business Information - all of 1\***

[REDACTED]  
[REDACTED]  
[REDACTED]



[REDACTED]

2. Transfer Lines **\*\*Confidential Business Information – b through n**

- a. Transfer lines from #11 Evaporator (EV011), 22 Clarifier (TA179), and/or 19B Clarifier (TA042) to the PPA Stabilization Acid Tank

[REDACTED]





1. Tanks and Equipment
  - a. SPA Evaporator Feed Tank (TA141)
  - b. SPA Evaporator #1 System
    - i. SPA Evaporator #1 (EV012)
    - ii. SPA Evaporator #1 Heat Exchanger (HE127)
    - iii. SPA Evaporator #1 Condenser System (CO018, SR024, PU007)
  - c. SPA Evaporator #2 System
    - i. SPA Evaporator #2 (EV014)
    - ii. SPA Evaporator #2 Heat Exchanger (HE129)
    - iii. SPA Evaporator #2 Condenser System (CO020, SR047, PU019)
  - d. SPA Evaporator #3 System
    - i. SPA Evaporator #3 (EV013)
    - ii. SPA Evaporator #3 Heat Exchanger (HE128)
    - iii. SPA Evaporator #3 Condenser System (CO019, SR026, PU018)
  - e. SPA Effluent Tank (TA152)
  - f. Oxidation Reactor (TA244)
  - g. #1 Aging Tank (TA189)
  - h. #2 Aging Tank (TA175)
  - i. Filter Feed Tank (TA143)
  - j. Aging Cooler #4 (CJ010)
  - k. Aging Cooler #3 (CJ009)
  - l. Aging Cooler #2 (CJ008)





- m. Aging Cooler #1 (CJ007)
- n. SPA #1 Filter Press (FP051)
- o. SPA #2 Filter Press (FP052)
- p. SPA Filter Product Tank (TA144)
- q. Tank 8 (TA217)
- r. Tank 9 (TA218)
- s. Tank 8 Heater (HE102)
- t. Tank 9 Heater (HE103)
- u. SPA Deflo Mix Tank (TA158)
- v. SPA Deflo Dilution Tank (TA159)
- w. #6 Tank (TA191)
- x. SPA Wash Water Tank (TA318)

## 2. Transfer Lines

- a. Transfer lines from SPA Evaporator Feed Tank to SPA Evaporator #1, #2, and #3
- b. Transfer lines from SPA Evaporator #1, #2, and #3 to the Oxidation Reactor and SPA Evaporator Feed Tank
- c. Transfer lines from Oxidation Reactor to 1<sup>st</sup> Stage Aging Tank
- d. Transfer lines from 1<sup>st</sup> Stage Aging Tank to Aging Coolers, 2<sup>nd</sup> Stage Aging Tank, Filter Feed Tank, SPA Evaporator Feed Tank, and SPA Evaporator #1, #2, and #3
- e. Transfer lines from 2<sup>nd</sup> Stage Aging Tank to Aging Coolers and Filter Feed Tank
- f. Transfer lines from SPA Filter Feed Tank to Aging Coolers, SPA #1 Filter Press, and SPA #2 Filter Press



- g. Transfer lines from SPA #1 Filter Press and SPA #2 Filter Press to the Filter Product Tank
- h. Transfer lines from Filter Product Tank to Filter Feed Tank, Car Wash Transfer Line, Tank 8, and Tank 9
- i. Transfer lines from Tank 8 and Tank 9 to heaters and to truck and rail car loadout
- j. Transfer lines from Simplot-Rock Springs sourced phosphoric acid from trucks and rail cars to the SPA Deflo Mix Tank
- k. Transfer lines from SPA Deflo Mix Tank to SPA Evaporator #2
- l. Transfer lines from SPA Evaporator #2 to SPA Deflo Dilution Tank, Tank 2, #6 Tank, and truck and rail car loadout
- m. Transfer lines from SPA Deflo Dilution Tank to Dilution Cooler, #6 Tank, and truck and rail car loadout
- n. Transfer lines from #6 Tank to truck and rail car loadout, SPA Deflo Mix Tank, and Tank 2

#### E. Acid Value Recovery System Units

The following equipment, tanks, and acid transfer lines are identified as Acid Value Recovery Units.

Materials from Acid Value Recovery Units are recovered into Upstream Operations as designated in this Facility Report or to the Acid Value Recovery Tank(s) as described in Section VI (Compliance Projects (Projects 1 and 2)).

The Acid Value Recovery Tank(s) that Simplot will install in accordance with Section VI of this Facility Report are also Acid Value Recovery System Units.

- 1. Tanks / Process Equipment
  - a. Tank 52 (TA047)
  - b. Tank 53 (TA046)
  - c. SPA Re-Pulp Tank (TA145)
  - d. Tank 2 (TA157)



- e. SPA Feed Tank (TA347)
  - f. [REDACTED] **\*\*Confidential Business Information\*\***
  - g. [REDACTED] **\*\*Confidential Business Information\*\***
  - h. Acid Value Recovery Units
    - i. Acid Value Recovery Tank(s)
    - ii. MRC Filter Wash Tank (TA037)
    - iii. 19B Filter Wash Tank (TA198)
    - iv. Tank 18 (TA401)
    - v. #1 Wash Water Tank (TA222)
  - i. Liquid Shipping System
    - i. Car Wash Tank (TA307) / Sump Equipment
2. Transfer Lines
- a. A & B 52% Transfer Lines
  - b. G1 Muds Transfer Line
  - c. G2 Muds Transfer Line
  - d. G1 42% Transfer Line
  - e. G2 42% Transfer Line
  - f. G1 & G2 28% Acid Transfer Line
  - g. Tank 52 to G1 Muds Transfer Line and G2 Muds Transfer Line
  - h. APP SPA Transfer Line
  - i. Transfer lines from SPA Re-Pulp Tank (TA145) to SPA Evaporator Feed Tank (TA141), Tank 57 (TA200) and Tank 56 (TA136), MRC Clarifier (TA040), and the Digester.



- j. [REDACTED]  
[REDACTED] **\*\*Confidential Business Information\*\***
- k. [REDACTED]  
**\*\*Confidential Business Information\*\***
- l. [REDACTED] **\*\*Confidential Business Information\*\***
- m. Transfer lines from Tank 2 to truck and railcar loadout and #6 Tank
- n. Transfer lines from Acid Value Recovery System Units to specific Upstream Units

#### F. Animal Feed Ingredient Production (AFIP)

The Simplot Don Plant DE Deflo process for AFIP at Granulation 3 consists of two basic parts: (1) the wet side (e.g., defluorination system, high speed mixer, scrubber systems); and (2) the dry side (e.g., blunger, dryer).

The following pieces of equipment in the Granulation 3 process are AFIP Units. Cleaning wastes or other materials from the wet side Animal Feed Ingredient Units are sent to the Phosphogypsum Stack System. There are two exceptions to this: Receiving Tank 7 and the Tank 7 Heater cleaning wastes or other materials are recovered to the Acid Value Recovery System. Cleaning wastes or other materials from the dry side Animal Feed Ingredient Units are recovered into the dry reclaim system at Granulation 1 and/or Granulation 2.

- 1. Tanks/Process Equipment
  - a. Receiving Tank 7 (TA192)
  - b. Tank 7 Heater (HE210)
  - c. East Batch Tank (TA231)
  - d. West Batch Tank (TA232)
  - e. Deflo Heater (HE170)
  - f. DE Mix Tank (TA234)
  - g. Deflo Product Cooler (CJ023)



- h. Feed Acid Tank (TA061)
  - i. High Speed Mixer (MX046)
  - j. Sump Tank (TA062)
  - k. Blunger (BN001)
  - l. Dryer (DR001)
  - m. Elevator and Conveying Equipment
  - n. Screening and Milling Equipment
2. Transfer Lines
- a. Railcar/truck Unloading to East and West Batch Tanks, starting after tee to Tank 55, Tank 56, and Tank 57 connection
  - b. Transfer line from pump at Tank 55 to East and West Batch Tanks
  - c. Transfer lines from Receiving Tank 7 to East and West Batch Tanks, starting after tee to Tank 55, Tank 56, and Tank 57 connection
  - d. Transfer lines from the East and West Batch Tanks to Deflo Heater, Deflo Product Cooler, DE Mix Tank, and Feed Acid Tank (TA061)
  - e. Transfer line from the Deflo Product Cooler to Tank 2
  - f. Transfer lines from the Sump Tank (TA062) to the transfer lines from the East and West Batch Tanks to the Feed Acid Tank (TA061)
  - g. Transfer lines from the Feed Acid Tank (TA061) to the High Speed Mixer
  - h. Transfer lines from the High Speed Mixer to the Blunger
3. Air Pollution Control Devices (APCD)
- a. Deflo Scrubber System
- The Deflo Scrubber System circulates process water to scrub fumes from specific units within the DE Deflo process. Make-up to the system is provided by Extraction Well Water and/or Fresh Water.



Blowdown from the system is sent to the Phosphogypsum Stack System.

The following equipment comprises the Deflo Scrubber System:

- i. Deflo Scrubber (SR041)
- ii. West Scrubber Seal Can (TA233)
- iii. Center Scrubber Seal Can (TA241)
- iv. East Scrubber Seal Can (TA242)
- v. Deflo Scrubber Fan (BL089)
- vi. Granulation #3 Scrubber Stack (SK002)

The Deflo Scrubber System evacuates fumes from the following processes, tanks, and associated equipment in the DE Deflo process:

Name	Asset #	Designation
East Batch Tank	TA231	AFIP
West Batch Tank	TA232	AFIP
Feed Acid Tank	TA061	AFIP
DE Mix Tank	TA234	AFIP

b. Entoleter Scrubber System

The Entoleter Scrubber System circulates process water to scrub fumes from specific units within the DE Deflo process. Make-up to the system is provided by Extraction Well Water and/or Fresh Water. Blowdown from the system is sent to the Phosphogypsum Stack System.

The following equipment comprises the Entoleter Scrubber System:

- i. Entoleter Scrubber (SR007)
- ii. Entoleter Scrubber Seal Tank (TA184)
- iii. Entoleter Scrubber Fan (BL021)
- iv. Granulation #3 Scrubber Stack (SK002)



The Entoleter Scrubber System evacuates fumes from the following processes, tanks, and associated equipment in the DE Deflo process:

Name	Asset #	Designation
High Speed Mixer	MX046	AFIP
Blunger	BN001	AFIP
Dryer	DR001	AFIP

## G. Granulation

The Facility's granulation process for Granulation #1 and Granulation #2 consists of two basic parts: (1) the wet side (e.g., reactor, acid scrubber system); and (2) the dry side (e.g., granulator, dryer).

Ammonium Sulfate, MAP, 40 Rock™, and 16-20-0 manufacturing operations are Downstream Operations.

The following pieces of equipment in the Granulation Plant(s) are Granulation Recovery System Units. Cleaning wastes or other materials from Granulation Recovery System Units are recovered into the granulation process as designated in this Facility Report or to the Granulation Recovery Tank itself as described in Section VI (Compliance Projects (Projects 3 and 4)) or may go to the wastewater reuse system.

1. Granulation Recovery System Units
  - a. Tank 33
  - b. Granulation Scrubbers
  - c. Granulation Reactor
  - d. Granulator
  - e. Dryer
  - f. Cooler
  - g. Elevators and Conveying Equipment
  - h. Screening and Milling Equipment
  - i. Granulation #1 Reactor Acid Feed Line to the Granulation #1 Plant



- j. Granulation #1 Reactor Muds Feed Line to the Granulation #1 Plant
- k. Granulation #2 Reactor Acid Feed Line to the Granulation #2 Plant
- l. Discharge line of Granulation #2 Muds Box to the Granulation #2 Plant
- m. Sulfate Plant Crystallizer
- n. Ammsox Tank (TA125)
- o. Sulfate Plant Surge Tank
- p. Sulfate Plant Seal Tank
- q. Sulfate Plant Fines Tank
- r. APP Storage Tank(s)
- s. APP Railcar Washout





## VI. Compliance Projects

The projects described below are the projects that are recovery related in Appendix 6 (Compliance Schedule) to the Consent Decree – the Acid Value Recovery System and the Granulation Recovery System. Time frames for completion of the projects are found in Appendix 6 (Compliance Schedule).

Projects 1 and 2 comprise a plan that will enable the Facility to clean Upstream Operations, Mixed-Use Units, AFIP processes, Grandfathered Units, SPA Recovery Units, and Acid Value Recovery System Units, and recover acid value from the cleaning wastes or other materials as described below.

Projects 3 and 4 are projects related to Granulation and recovery of materials in that process.

### A. Acid Value Recovery System Related Projects

The Acid Value Recovery System will enable Simplot to recover the value of cleaning wastes or other materials from pipes, tanks, process equipment, or other storage or transport units that are identified as SPA Recovery Units or Acid Value Recovery System Units in this Facility Report. The Acid Value Recovery System will also enable Simplot to recover cleaning wastes or other materials from some units identified as Upstream Operations, AFIP processes, Grandfathered Units, or Mixed-Use Units in this Facility Report. (See Diagram 1 for an overview of streams handled to and from the Acid Value Recovery Tank(s).) In accordance with Appendix 5.A (Minimizing and Addressing Spills and Leaks), the Acid Value Recovery System will enable Simplot to recover spills and leaks in Semi-Segregable, Predominately Containable, and Containable Impervious Areas described in Section VII (Containment of Phosphoric Acid Production Related Spills and Leaks). The system will involve instrumentation and lines to allow the recovery of high acid content material from the Semi-Segregable Areas, as well as full recovery from Containable Impervious Areas. The system will also allow the full recovery from Predominately Containable Areas, unless the area is experiencing a non-routine situation as described in Appendix 5.A (Minimizing and Addressing Spills and Leaks). Recovery of material pumped from sump and pad secondary containment in the Semi-Segregable, Containable Impervious, and Predominately Containable Areas will also occur through the Acid Value Recovery System.



## 1. Project Descriptions

### **Project 1: Acid Value Recovery Tank and Wash Solution System in Phosphoric Acid Plant**

The Acid Value Recovery Tank and wash solution system project in the Phosphoric Acid Plant will install new tank(s), piping, and controls to enable Simplot to recover the value of cleaning wastes or other materials, as specified in Section VI.A.2 (Project Operations) of this Facility Report below.

Simplot will install one new Acid Value Recovery Tank, in addition to utilizing two existing tanks, for the Acid Value Recovery System. At any one time, two of the tanks may be used in Upstream Operations, Mixed-Use Unit, or other Acid Value Recovery Unit services when not operating as an Acid Value Recovery Tank. After use as an Acid Value Recovery Tank or other Acid Value Recovery Unit and prior to placing the tank into Upstream Operations or Mixed-Use Unit service, the tank being placed into Upstream Operations or Mixed-Use Unit service must be cleaned as an Acid Value Recovery Unit and any cleaning wastes or other materials managed accordingly, after which time, the tank will assume an Upstream Operations designation as defined in paragraph 9 of the Consent Decree. The existing #1 Wash Water Tank and/or Tank 18 provide for continued Acid Value Recovery System operation during cleaning and/or maintenance of the Acid Value Recovery Tank. Cleaning wastes or other materials from #1 Wash Water Tank and Tank 18 will be handled in the same way as the cleaning wastes or other materials from the Acid Value Recovery Tank itself as described in Section VI.A.2 (Project Operations) below.

In addition, new or upgraded instrumentation and piping may be needed to ensure the return of spills and leaks and cleaning wastes or other materials of: (1) phosphoric acid, sulfuric acid, nitric acid, SPA Recovery Unit effluent or Acid Value Recovery System effluent; or (2) NHACS, Process Wastewater, or Phosphogypsum Stack System Wastewater when mixed with any of the preceding solutions due to spills, leaks, or cleaning of leaks and spills to the Acid Value Recovery System. Project 1 necessarily coincides with Project 2 below.

### **Project 2: Recovery System Return Piping**



Simplot will install new piping and/or utilize existing piping to enable: (1) cleaning of phosphoric acid lines that take materials from the Phosphoric Acid Plant and convey them to Granulation and SPA and then return those cleaning wastes or other materials to the Acid Value Recovery System; (2) cleaning SPA Recovery Units, and Acid Value Recovery Units and return those cleaning wastes or other materials to the Acid Value Recovery System and/or direct them to the Upstream Operations/Mixed-Use Unit operations set forth in VI.A.3 below; (3) recovery of cleaning wastes or other materials from Upstream Operations, Mixed-Use Units, or Grandfathered Units that were cleaned utilizing Acid Value Recovery Tank effluent (4) recovery of SPA secondary solids (filter solids) and return those materials to the Acid Value Recovery System, to Upstream Operations/Mixed-Use Unit operations, or directly to Granulation operations; and (5) recovery of high acid content material from Semi-Segregable sumps to the Acid Value Recovery System and/or to a phosphoric acid storage tank.

## 2. Project Operations

The Acid Value Recovery System will be comprised of the Acid Value Recovery Tank, #1 Wash Water Tank, and Tank 18, along with pumps and piping to supply cleaning solution to units that are part of Upstream Operations or AFIP Operations, or identified as Mixed-Use Units, Grandfathered Units, SPA Recovery Units, or Acid Value Recovery System Units and recover the cleaning wastes or other materials back to the Acid Value Recovery Tank, #1 Wash Water Tank, Tank 18, or direct those wastes or other materials to Upstream Operations/Mixed-Use Unit operations that are considered part of the Acid Value Recovery System as described below.

Prior to cleaning, equipment will be emptied by recovering as much acid as possible back into the Phosphoric Acid, SPA, SPA Deflo, PPA, DE Deflo, APP or Granulation production processes, which may include final acid draining by opening manways and flowing material across concrete pads to Semi-Segregable, Predominately Containable, or Containable Impervious Sumps.

In accordance with the Consent Decree, the following solutions may be mixed in any combination within the Acid Value Recovery Tank, #1 Wash Water Tank, and/or Tank 18 for use in equipment cleaning and



subsequent recovery in the Acid Value Recovery System<sup>8</sup>: Phosphogypsum Stack System Wastewater, Process Wastewater, or NHACS can be mixed with phosphoric acid or Acid Value Recovery Tank Effluent.

In accordance with the Consent Decree, the following solutions may be mixed in any combination within SPA Recovery Units for use in equipment cleaning and subsequent recovery in the Acid Value Recovery System: Phosphogypsum Stack System Wastewater, Process Wastewater, or NHACS. These solutions can also be mixed with SPA Recovery Unit effluent, or Acid Value Recovery Tank Effluent.

The Acid Value Recovery system also includes a dewatering area that is used for mechanically removing solids from units designated as Acid Value Recovery Units and SPA Recovery Units such as pipes, pumps, etc. during repair, maintenance, or turnaround. Solids removal is performed with high pressure cleaning with NHACS or by other mechanical means. If hazardous, then pumpable cleaning wastes or other materials (including entrained solids) will be recovered to the Acid Value Recovery System. If non-hazardous, then these wastes or other materials can be sent to the Phosphogypsum Stack System or recovered within manufacturing operations. Non-pumpable solids, if non-hazardous, will be disposed of in the Phosphogypsum Stack System. If hazardous, then these solids will be handled in compliance with the RCRA Requirements as defined in Paragraph 9 of the Consent Decree. After cleaning, the equipment is either returned to the plant or disposed of in compliance with applicable law. Units designated as part of Upstream Operations or as Mixed-Use Units or AFIP Units or Grandfathered Units may also be cleaned in this area. Wastes or other materials generated from the cleaning of Upstream Operations, Mixed-Use Unit, AFIP Unit, or Grandfathered Unit operations can be disposed of in the Phosphogypsum Stack System in accordance with Paragraph 17 of the Consent Decree.

### 3. Acid Value Recovery Options

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<sup>8</sup> If Upstream Operations or Mixed-Use Units are cleaned with Process Wastewater, Phosphogypsum Stack System Wastewater and/or NHACS without the addition of SPA Recovery Unit effluent, or Acid Value Recovery System effluent, then the cleaning wastes may be discharged to the phosphogypsum stack system or used within Upstream Operations.



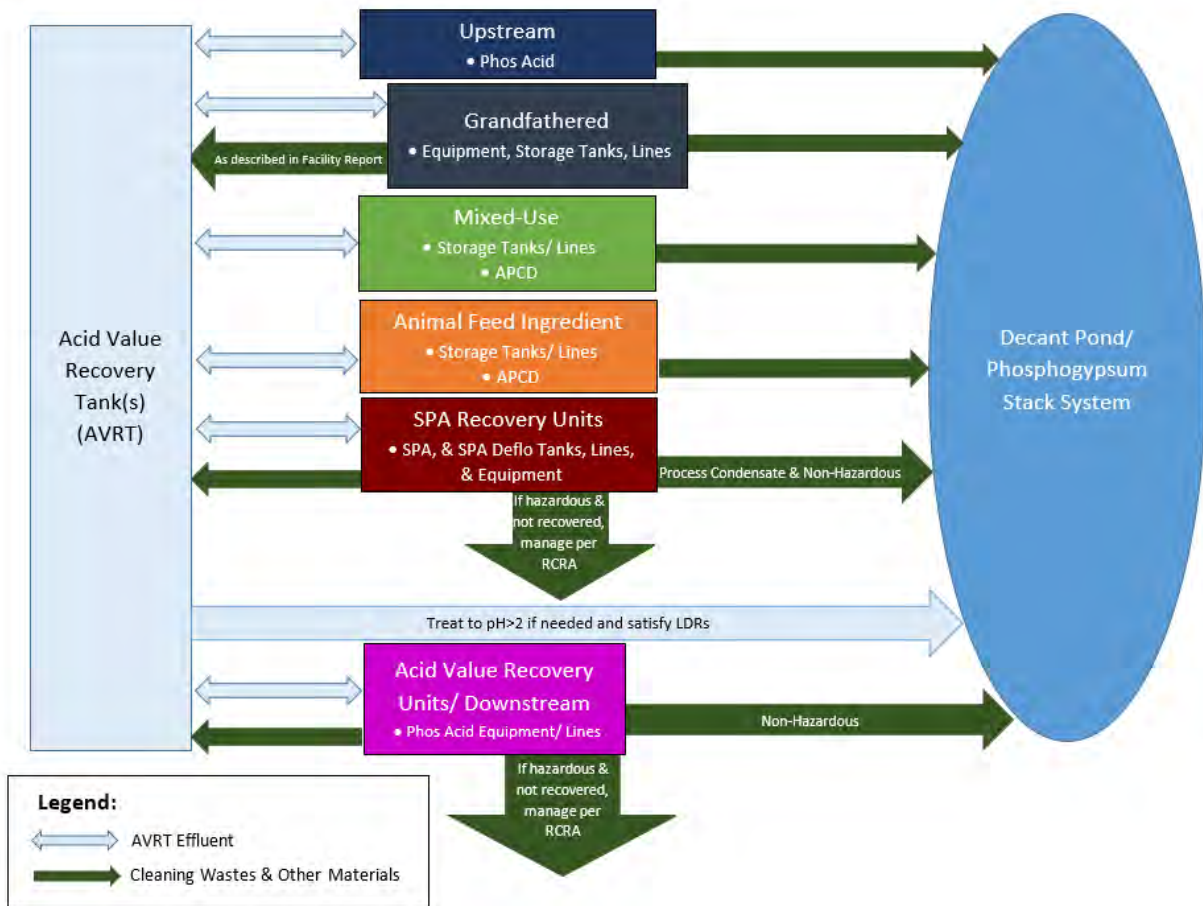
The Acid Value Recovery System will be engineered to return wastes or other materials generated from cleaning Acid Value Recovery Units and SPA Recovery Units into Upstream Operations/Mixed-Use Unit operations where their values are recovered or managed through the following (Diagram 2):

- a. As a wash on the Phosphogypsum filter, provided that the wash passing through the filter is sent to the phosphoric acid reactor; and/or
- b. As direct make up to the phosphoric acid reactor; and/or
- c. Used in a pre-reacted ore process unit, as described in Section VIII (Proposed Phosphoric Acid Production Related Operations).
- d. Placed in the evaporator feed tanks or phosphoric acid storage tanks for recovery, if representative sampling<sup>9</sup> for the stream has shown a P<sub>2</sub>O<sub>5</sub> content above 1%.
- e. If the materials cannot be used for acid recovery, discharged to the Phosphogypsum Stack System, if in compliance with the LDR standards set forth in 40 C.F.R. Part 268, Subpart D.

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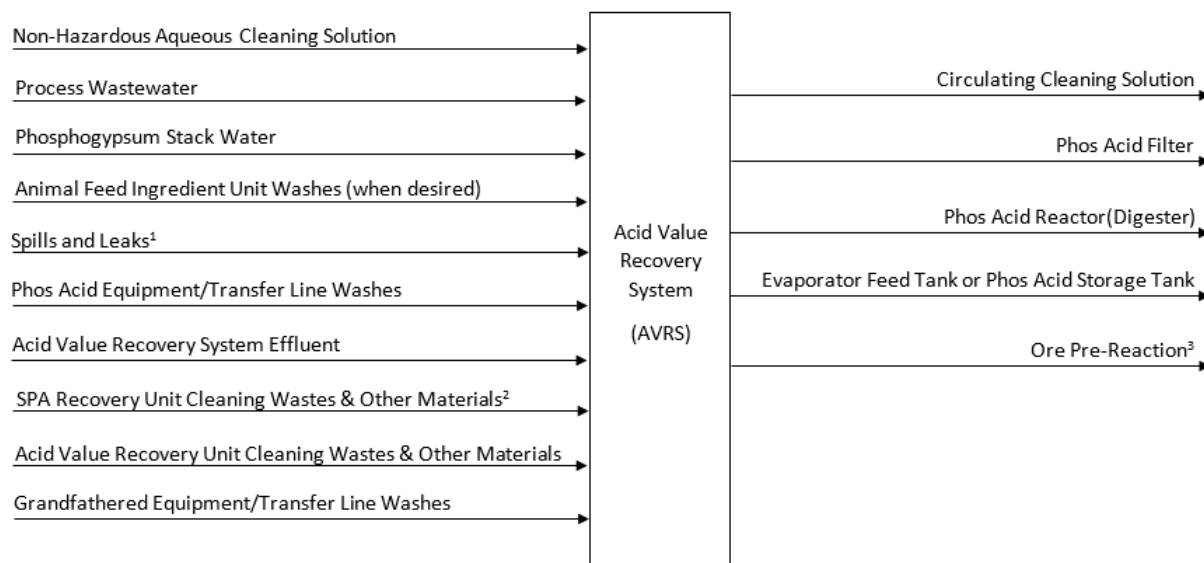
<sup>9</sup> Representative sampling will include quarterly sampling, or sampling at the frequency of generation if cleaning wastes or other materials are generated less than quarterly and may be performed in-house.

Diagram 1. Acid Value Recovery Tank Inputs and Effluents<sup>10</sup>



<sup>10</sup> This diagram is a simplification of the management requirements for the Acid Value Recovery System inputs and effluents. Nothing in this diagram substitutes for or overrides the narrative descriptions in the Facility Report or Appendix 5.A (Minimizing and Addressing Spills and Leaks).

Diagram 2. Acid Value Recovery Tank Inputs and Effluents<sup>11</sup>



<sup>1</sup> Spills and leaks include: P<sub>2</sub>O<sub>5</sub>, H<sub>2</sub>SO<sub>4</sub>, Nitric Acid, and mixtures of the proceeding with Process Wastewater, Phosphogypsum Stack Water, and NHACS

<sup>2</sup> Does not include SPA Process Condensates or non-hazardous materials (such as SPA APCD blowdown)

<sup>3</sup> Potential Future Project described in Section VIII of the Facility Report

## B. Granulation Related Projects

### 1. Project Descriptions

#### **Project 3. Granulation Recovery System and Wash Solution System in Granulation Plant**

Simplot has a Granulation Recovery System for the Granulation Plant installed and operating. The Granulation Recovery System consists of sumps, collection tanks, and pumps to transport and recirculate wash solution between the Granulation Recovery System Units, the Granulation Recovery System, and/or consume the wash solution in the Granulation Plant(s) as specified in Section VI.B.2 (Project Operations) below. When the volume becomes too large for recovery to Granulation, the wash solution from the Granulation Recovery System may also report to the wastewater reuse facility.

<sup>11</sup> This diagram is a simplification of the management requirements for Acid Value Recovery System inputs and effluents. Nothing in this diagram substitutes for or overrides the narrative descriptions in the Facility Report or Appendix 5.A (Minimizing and Addressing Spills and Leaks).



#### **Project 4. Additional Granulation Recovery Tank as Needed**

Based on Simplot's determination, it will install, an additional Granulation Recovery Tank near the granulation plants to improve the capture of spills, leaks, and cleaning solutions so materials may be returned to the granulation process via the Granulation Recovery System, as identified in the Facility Report.

#### 2. Project Operations

Solutions and solids generated from cleaning APP Storage Tanks, APP Railcars, and/or Granulation equipment other than Acid Value Recovery System Units as described in the Facility Report will either be recovered in the Granulation process or sent to the wastewater reuse facility. If solids will not be reused, solids will be characterized to determine if they are hazardous under the RCRA Requirements of Paragraph 9 of the Consent Decree for corrosivity (pH equal to or less than 2 or pH equal to or greater than 12.5) and/or toxicity. If they are non-hazardous, the solids may be transferred to the Phosphogypsum Stack System. The Granulation Recovery System enables Simplot to recover the value of cleaning wastes or other materials generated from the use of NHACS or Granulation Recovery System effluent from pipes, tanks, process equipment, or other storage or transport units identified as Granulation Recovery System Units. In accordance with the BMP, the Granulation Recovery System also enables Simplot to recover spills and leaks in Containable Impervious Areas within the Granulation Plants and the Ammonium Sulfate Plant described in Section VII (Containment of Phosphoric Acid Production Related Spills and Leaks) of this Facility Report.

Granulation Dry Side Equipment, such as the granulator, dryer, cooler, elevators, screens, and milling equipment are cleaned by mechanical means and the material is recovered through the dry reclaim (reject) systems at Granulation #1 and Granulation #2. High pressure cleaning with NHACS may be used to remove hard scale material and, if hazardous, this material will be recovered to the Granulation Recovery System. If non-hazardous, then this scale material may either be recovered to the Granulation Recovery System or disposed of in the Phosphogypsum Stack System. The dry reclaim systems will also





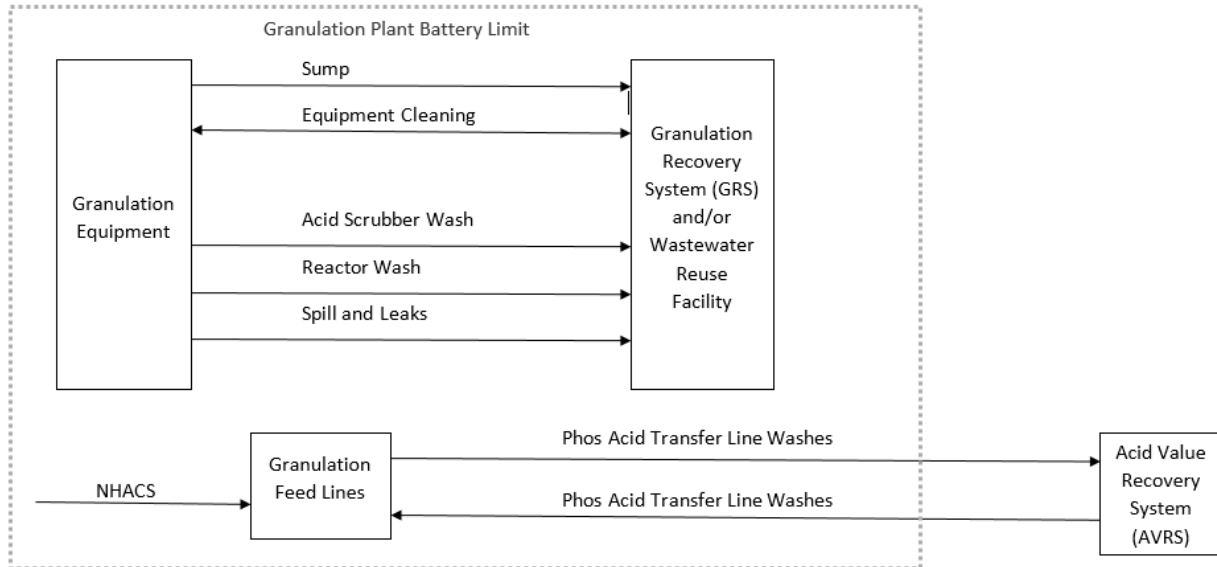
accept cleaning materials from the dry side Animal Feed Ingredient Units.

NHACS may be used for wash down of the floors, conveyor belts, and other equipment within the granulation plants. The resulting streams will be recovered to the Granulation Recovery System and/or sent to the wastewater reuse facility. Process Wastewater and Phosphogypsum Stack System Water may not be used to wash down floors within the granulation plants.

- a. The Granulation Recovery Tank will in turn reuse or recover the recoverable streams as follows:
  - i. Consumed in the acid scrubber system(s) for consumption in the granulation process; and/or
  - ii. Consumed in the Granulation reactor(s); and/or
  - iii. Recirculated to clean Granulation Recovery System Units.

The Granulation Recovery Tank(s) will be washed with a cleaning solution (NHACS) and the cleaning solution from this cleaning may be recovered to the in-service Granulation Recovery Tank(s), recovered back into Granulation directly, or sent to the wastewater reuse facility.

Diagram 3 – Granulation Plant Equipment and Recovery System Designation along with System Inputs and Effluents<sup>12</sup>



<sup>12</sup> This diagram is a simplification of the management requirements for Granulation Recovery System inputs and effluents. Nothing in this diagram substitutes for or overrides the narrative descriptions in the Facility Report or Appendix 5.A (Minimizing and Addressing Spills and Leaks).



## VII. Containment of Phosphoric Acid Production Related Spills and Leaks

### A. Semi-Segregable Areas (Figure 10)

For the Semi-Segregable area sumps, Process Wastewater has flows through the sumps in the range of 50-150 gpm depending upon circumstance. The normal flow path for the sumps in these areas will be to the Phosphogypsum Stack System.

#### 1. SPA North Sump Area

Due to the engineered slope of the concrete pad in the SPA North Sump area and the configuration of the Phosphoric Acid Plant, spills and leaks of phosphoric acid and nitric acid onto the concrete pad will flow to the sump and mix with the Process Wastewater being pumped from the sump. If high acid content is detected by an acid content monitoring instrument, then the entire flow from the sump will be diverted for recovery in accordance with Appendix 5.A (Minimizing and Addressing Spills and Leaks).

#### 2. Granulation #3 & Deflo Scrubber Sump Area

Due to the engineered slope of the concrete pads in the Granulation #3 and Deflo Scrubber areas and the configuration of the Granulation #3 Plant, spills and leaks of phosphoric acid and limestone onto the concrete pads will flow to the sumps and mix with the Process Wastewater being pumped from the sumps. If high acid content is detected by an acid content monitoring instrument in the Granulation #3 Sump, then the sump pump will be shutdown to allow for recovery of the spilled material in accordance with Appendix 5.A (Minimizing and Addressing Spills and Leaks).

#### 3. Deflo Batch Tank Sump Area

Due to the engineered slope of the concrete pads in the Deflo Batch Tank area and the configuration of the DE Deflo Plant, spills and leaks of phosphoric acid and limestone onto the concrete pads will flow to the sump and mix with the Process Wastewater being pumped from the sump. If high acid content is detected by an acid content monitoring instrument in the Sump Tank, then the Sump Tank pump will be shut



down or diverted to allow for recovery of the spilled material in accordance with Appendix 5.A (Minimizing and Addressing Spills and Leaks).

There are some areas in the phosphoric acid area that are not concrete and they are shown with redlines in Figure 12. The non-concrete areas are designated as "other areas" such that spills and leaks in these areas must be managed in accordance with RCRA Requirements and any other applicable law.

#### B. Predominately Containable Areas (Figure 11)

1. #1 Sump Area
2. #2 Sump Area
3. #3 Sump Area
4. #4 Sump Area
5. #5 Sump Area
6. #8 Sump Area
7. #9 Sump Area
8. Ore Wash Pad Area

For the Predominately Containable area sumps, large volumes of Process Wastewater, Bevill-Excluded cleaning wastes or other materials, and/or non-hazardous cleaning wastes are handled within the sump on a non-routine basis. The normal flow path for the sumps in these areas will be to the Acid Value Recovery System. During the large volume non-routine events identified in Section 1.3.1 of Appendix 5.A (Minimizing and Addressing Spills and Leaks), the sump will be directed to the Phosphogypsum Stack System after a 2-minute flush of the sump to the Acid Value Recovery System. In certain non-routine situations as described in Section 1.3.1 of Appendix 5.A (Minimizing and Addressing Spills and Leaks), specific Acid Value Recovery Units and/or specific equipment cleaning practices will be shut down when the sump is directed to the Phosphogypsum Stack System.

#### C. Containable Impervious Areas (Figure 12)

1. #6 Sump Area
2. #7 Sump Area
3. #10 Sump Area



4. Car Wash Sump Area
5. 33 Tank Sump Area (Granulation #1)
6. Granulation #2 Plant Area

Spills and leaks of phosphoric acid, sulfuric acid, and nitric acid onto impervious areas designated by yellow lines in Figure 12 (Containable Impervious areas) will be separately contained, and then recovered and/or sent to the Elementary Neutralization Unit (ENU) for use in the wastewater reuse facility in accordance with Appendix 5.A (Minimizing and Addressing Spills and Leaks). The foregoing does not relieve Simplot of its obligations for any spills and leaks under any applicable law.

#### D. Other Areas

Any leak or spill of a hazardous material, including phosphoric acid, sulfuric acid, and nitric acid, that is not contained within the Containable Impervious Areas, Semi-Segregable Areas, or Predominately Containable Areas of the plant will be managed in accordance with RCRA Requirements and any other applicable law.



### VIII. Proposed Phosphoric Acid Production Related Operations

Simplot has advised EPA that it is considering one or more of the following projects at its Don Plant Facility, but planning has not evolved to where detailed information is available.

#### A. Upstream Units

The following future installations will be designated as Upstream Units:

1. **\*\*Confidential Business Information\*\*** [REDACTED]
2. **\*\*Confidential Business Information\*\*** [REDACTED]
3. **\*\*Confidential Business Information\*\*** [REDACTED]
4. **\*\*Confidential Business Information\*\*** [REDACTED]
5. **\*\*Confidential Business Information\*\*** [REDACTED]
6. **\*\*Confidential Business Information\*\*** [REDACTED]
7. **\*\*Confidential Business Information\*\*** [REDACTED]
8. **\*\*Confidential Business Information\*\*** [REDACTED]



9. **\*\*Confidential Business Information\*\*** [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

10. **\*\*Confidential Business Information\*\*** [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

Figure 1: [REDACTED] **\*\*Confidential Business Information\*\***



**B. Mixed-Use Units**

The following future installations will be designated as Mixed-use Units:





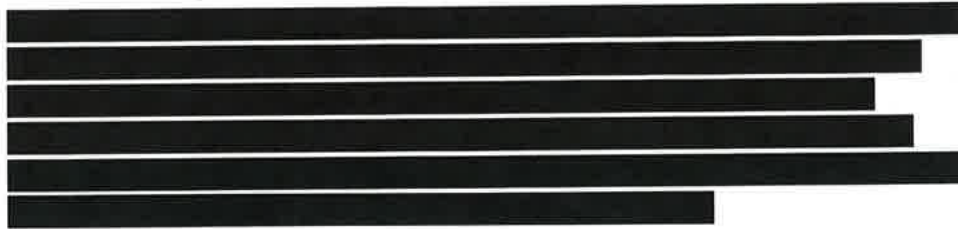
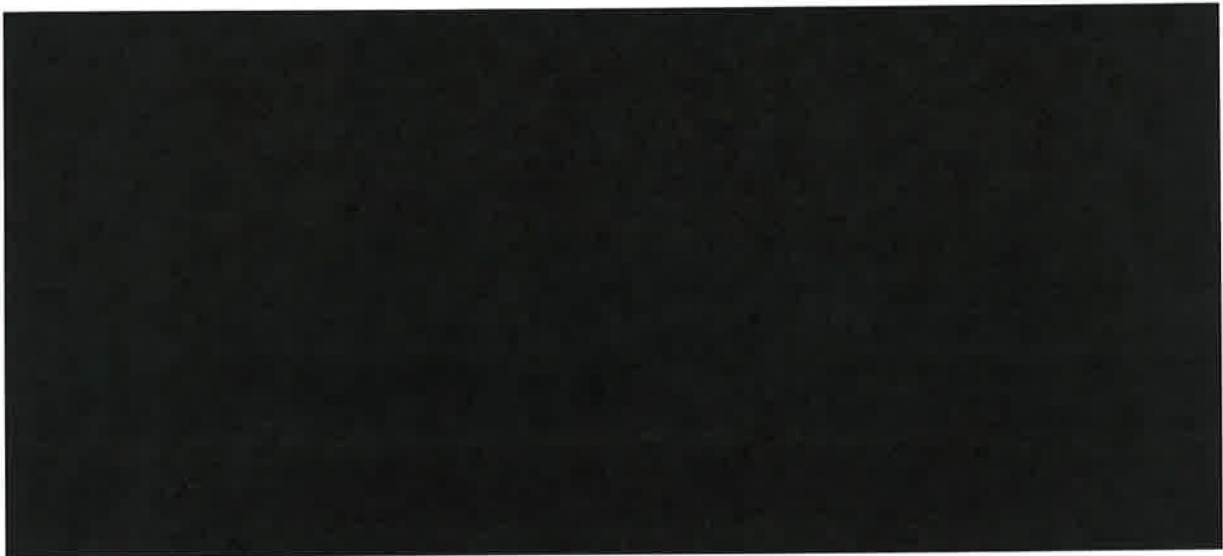


Figure 2: **\*\*Confidential Business Information\*\***



2. **\*\*Confidential Business Information\*\*** [Redacted]  
[Redacted]  
[Redacted]
3. **\*\*Confidential Business Information\*\*** [Redacted]  
[Redacted]
4. **\*\*Confidential Business Information\*\*** [Redacted]  
[Redacted]  
[Redacted]  
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5. **\*\*Confidential Business Information\*\*** [Redacted]  
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6. **\*\*Confidential Business Information\*\*** [Redacted]  
[Redacted]





- [REDACTED]
- [REDACTED]
9. **\*\*Confidential Business Information\*\*** [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

E. Acid Value Recovery Units and/or SPA Recovery Units

The following future installations will be designated as Acid Value Recovery Units and/or SPA Recovery Units:

1. **\*\*Confidential Business Information\*\*** [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]
2. **\*\*Confidential Business Information\*\*** [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]
3. **\*\*Confidential Business Information\*\*** [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]
4. **\*\*Confidential Business Information\*\*** [REDACTED]  
[REDACTED]
5. **\*\*Confidential Business Information\*\*** [REDACTED]  
[REDACTED]
6. **\*\*Confidential Business Information\*\*** [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]



However, the Consent Decree does not bind Simplot to implement the proposed project(s) as depicted in the above figures and diagrams. If Simplot chooses to implement any changes other than any of those depicted in the above figures and diagrams, the Facility Report will be modified prior to implementation pursuant to Section XVIII (Modification) of the Consent Decree, and EPA will determine whether the new process as designed involves Upstream Operations units, Animal Feed Ingredient Production Units, Mixed-Use Units, Acid Value Recovery System Units, SPA Recovery Units, or Downstream Operations units and amend the Facility Report to memorialize those determinations consistent with the descriptions above. Such determinations will be conditioned upon the new process being built substantially as designed. If the new process deviates from that standard, then EPA will determine whether the new process as built involves Upstream Operations, Animal Feed Ingredient Production, Mixed-Use Units, Acid Value Recovery System Units, SPA Recovery Units, or Downstream Operations and amend the Facility Report to memorialize those determinations consistent with the descriptions above.



**IX. Non-Phosphoric Acid Production Proposed Projects**

Simplot has advised EPA that it is considering one or more of the following projects at its Don Plant Facility, but planning has not evolved to where detailed information is available. Once Simplot decides to implement one of these proposed projects and the project has identifiable units associated with the process, Simplot should confer with EPA to assign unit designations and modify the Facility Report.

A. **\*\*Confidential Business Information\*\*** [REDACTED]

[REDACTED]

B. **\*\*Confidential Business Information\*\*** [REDACTED]

[REDACTED]



## X. Authorized Future Installations

This section applies to future installations that are not defined in scope (Section VIII) but may be needed in the future.

### A. Procedure

The projects in (B) below will be deemed Upstream Operations units, AFIP units, Mixed-Use Units, Acid Value Recovery Units, or Granulation Recovery Units as applicable, when installed within contained concrete areas and will not require prior approval by EPA provided that:

1. Simplot's Phosphogypsum Stack System is in compliance with the requirements of Appendix 1.B (Phosphogypsum Stack System Construction and Operational Requirements) of the Consent Decree, and that Simplot is in compliance with the Financial Assurance requirements of the Consent Decree (Paragraph 26 and Appendix 2); and
2. Simplot provides EPA with written notice at least ninety (90) Days in advance of the reconfiguration or installation of said project

However, if, as a result of circumstances that require Simplot to install or reconfigure such equipment in less than ninety (90) Days from the time a decision is made to undertake such action, then Simplot will provide written notice to EPA as soon as possible and in all events prior to the installation or reconfiguration of such equipment; and

3. Simplot obtains and/or modifies any permit(s) required by local, state, or federal agencies; and
4. Simplot submits to EPA for approval a modified version of this Facility Report with the changes identified at least sixty (60) Days in advance of the reconfiguration or installation of said project; and
5. If applicable, Simplot submits to EPA for approval any modified section(s) of Appendix 5.A (Minimizing and Addressing Spills and Leaks) at least forty-five (45) Days in advance of the reconfiguration or installation of said project.

### B. Future Installations



1. Any existing tank within the battery limits of the Phosphoric Acid and AFIP Plants (Figure 13) which may or may not be storing phosphoric acid, can be converted to phosphoric acid storage service up to, but excluding Merchant Grade Acid. Any tank placed into phosphoric acid storage service will be structurally adequate and physically compatible with the contents of the tank.
2. Up to a total of two new phosphoric acid tanks storing First Saleable Product may be added within the battery limits of the Phosphoric Acid and AFIP Plants (Figure 13), where the stored phosphoric acid product in the new tank(s) will be sent for use in Granulation so long as the new unit performs the same function as the existing Acid Value Recovery System tanks identified in this Facility Report. The installation of more than two such tanks will require advance approval by EPA in order to be considered an Acid Value Recovery Unit.
3. APCDs (scrubbers) may be newly installed, replaced, or modified if they are servicing Upstream Operations, AFIP Units, or Mixed-Use Units identified in this Facility Report. APCDs may not be reconfigured to service any Downstream Operations or any chemical processes which they are not already serving as identified in this Facility Report.
4. APCDs (scrubbers) may be newly installed, replaced, or modified if they are servicing Acid Value Recovery Units or Downstream Operations units identified in this Facility Report, provided the blowdown from these APCDs are nonhazardous in accordance with RCRA requirements.
5. Phosphoric acid piping systems and underflow piping systems associated with Upstream Operations, AFIP Units, Mixed-Use Units, or Acid Value Recovery Units, identified in this Facility Report may be installed, replaced, or modified provided that the replacement or modified systems are located within the battery limits of the Phosphoric Acid and AFIP Plants (Figure 13) or the tank farms, excluding Granulation, and serve only the phosphoric acid production operations identified in this Facility Report for those Upstream Operations, AFIP Units, Mixed-Use Units or Acid Value Recovery Units.


**XI. Alternate Equipment Name Reference Tables**

<u>Tank/Equipment Name</u>	Tank No.	Type of Service Phos Acid (%) or Other	Alternate Name(s)
Digester	DI001	28	Reactor
West Flash Cooler	CJ002	28	None
East Flash Cooler	CJ001	28	None
West Pre-Condenser	CO004	Process Water	None
West Barometric Condenser	CO003	Process Water	None
East Pre-Condenser	CO002	Process Water	None
East Barometric Condenser	CO001	Process Water	None
West Flash Cooler Vacuum System	SR003, PU004	Process Water	None
East Flash Cooler Vacuum System	SR002, PU005	Process Water	None
West Condenser Seal Tank	TA051	Process Water	None
East Condenser Seal Tank	TA050	Process Water	None
Center Seal Tank	TA053	Process Water	None
#1/#2 Belt Filter Spray Pit		Process Water	#1/#2 Filter Spray Pit or #1/#2 Spray Pit
#1 Belt Filter	FP002	28	#1 Filter
#1 Filter 1 <sup>st</sup> Filtrate Tank	TA009	28	#1 Filter 1 <sup>st</sup> Filtrate Can
#1 Filter 2 <sup>nd</sup> Filtrate Tank	TA010	Process Water	#1 Filter 2 <sup>nd</sup> Filtrate Can
#1 Filter 3 <sup>rd</sup> Filtrate Tank	TA011	Process Water	#1 Filter 3 <sup>rd</sup> Filtrate Can
#1 Filter 4 <sup>th</sup> Filtrate Tank	TA012	Process Water	#1 Filter 4 <sup>th</sup> Filtrate Can
#1 Filter Vacuum System	SP100, SR042, PU001	Process Water	None
#2 Belt Filter	FP003	28	#2 Filter
#2 Filter 1 <sup>st</sup> Filtrate Tank	TA013	28	#2 Filter 1 <sup>st</sup> Filtrate Can
#2 Filter 2 <sup>nd</sup> Filtrate Tank	TA014	Process Water	#2 Filter 2 <sup>nd</sup> Filtrate Can




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<u>Tank/Equipment Name</u>	Tank No.	Type of Service Phos Acid (%) or Other	Alternate Name(s)
#2 Filter 3 <sup>rd</sup> Filtrate Tank	TA015	Process Water	#2 Filter 3 <sup>rd</sup> Filtrate Can
#2 Filter 4 <sup>th</sup> Filtrate Tank	TA016	Process Water	#2 Filter 4 <sup>th</sup> Filtrate Can
#2 Filter Vacuum System	SP101, SR043, PU002	Process Water	None
#3 Belt Filter Spray Pit		Process Water	#3 Filter Spray Pit or #3 Spray Pit
#3 Belt Filter	FP004	28	#3 Filter
#3 Filter 1 <sup>st</sup> Filtrate Tank	TA017	28	#3 Filter 1 <sup>st</sup> Filtrate Can
#3 Filter 2 <sup>nd</sup> Filtrate Tank	TA018	Process Water	#3 Filter 2 <sup>nd</sup> Filtrate Can
#3 Filter 3 <sup>rd</sup> Filtrate Tank	TA019	Process Water	#3 Filter 3 <sup>rd</sup> Filtrate Can
#3 Filter 4 <sup>th</sup> Filtrate Tank	TA020	Process Water	#3 Filter 4 <sup>th</sup> Filtrate Can
#3 Filter Vacuum System	SP102, SR044, PU033	Process Water	None
#4 Belt Filter Spray Pit		Process Water	#4 Filter Spray Pit or #4 Spray Pit
#4 Belt Filter	FP032	28	#4 Filter
#4 Filter 1 <sup>st</sup> Filtrate Tank	TA223	28	#4 Filter 1 <sup>st</sup> Filtrate Can
#4 Filter 2 <sup>nd</sup> Filtrate Tank	TA224	Process Water	#4 Filter 2 <sup>nd</sup> Filtrate Can
#4 Filter 3 <sup>rd</sup> Filtrate Tank	TA225	Process Water	#4 Filter 3 <sup>rd</sup> Filtrate Can
#4 Filter 4 <sup>th</sup> Filtrate Tank	TA226	Process Water	#4 Filter 4 <sup>th</sup> Filtrate Can
#4 Filter Vacuum System	SP103, SR040, PU020	Process Water	None
Blend Tank	TA398	Process Water	None
Flash Cooler Condenser Pump Tank	TA038	Process Water	FCC Tank
East Gypsum Repulp Tank	TA399	Gypsum Slurry	East Repulp Tank
West Gypsum Repulp Tank	TA400	Gypsum Slurry	West Repulp Tank
West Booster Station Tank	TA373	Gypsum Slurry	None
East Booster Station Tank	TA374	Gypsum Slurry	None


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<u>Tank/Equipment Name</u>	Tank No.	Type of Service Phos Acid (%) or Other	Alternate Name(s)
MRC Clarifier	TA040	28	28% Clarifier or Metal Reactor Clarifier
19B Clarifier	TA042	28, 42	Spare Clarifier or Tank 19B
Tank 50	TA044	28	50 Tank
Tank 51	TA041	28	51 Tank
Evaporator #2 Barometric Condenser	CO038	Process Water	Evaporator #2 Condenser; PPA #2 Evaporator Condenser
Evaporator #2 Hotwell	TA418	Process Water	PPA #2 Evaporator Hotwell
Evaporator #3	EV003	28, 42, 52	None
Evaporator #3 Heat Exchanger	HE003	28, 42, 52	None
Evaporator #3 Barometric Condenser	CO030	Process Water	Evaporator #3 Condenser
Evaporator #3 Hotwell	TA410	Process Water	None
Evaporator #4	EV004	28, 42, 52	None
Evaporator #4 Heat Exchanger	HE004	28, 42, 52	None
Evaporator #4 Barometric Condenser	CO031	Process Water	Evaporator #4 Condenser
Evaporator #4 Hotwell	TA411	Process Water	None
Evaporator #6	EV006	28, 42, 52	None
Evaporator #6 Heat Exchanger	HE006	28, 42, 52	None
Evaporator #6 Barometric Condenser	CO032	Process Water	Evaporator #6 Condenser
Evaporator #6 Hotwell	TA412	Process Water	None
Evaporator #8	EV008	28, 42, 52	None
Evaporator #8 Heat Exchanger	HE008	28, 42, 52	None
Evaporator #8 Barometric Condenser	CO034	Process Water	Evaporator #8 Condenser


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<u>Tank/Equipment Name</u>	Tank No.	Type of Service Phos Acid (%) or Other	Alternate Name(s)
Evaporator #8 Hotwell	TA413	Process Water	None
Evaporator #9	EV009	28, 42, 52	None
Evaporator #9 Heat Exchanger	HE009	28, 42, 52	None
Evaporator #9 Barometric Condenser	CO035	Process Water	Evaporator #9 Condenser
Evaporator #9 Hotwell	TA414	Process Water	None
Evaporator #10	EV010	28, 42, 52	None
Evaporator #10 Heat Exchanger	HE010	28, 42, 52	None
Evaporator #10 Barometric Condenser	CO036	Process Water	Evaporator #10 Condenser
Evaporator #10 Hotwell	TA415	Process Water	None
Evaporator #11	EV011	28, 42, 52	None
Evaporator #11 Heat Exchanger	HE011	28, 42, 52	None
Evaporator #11 Barometric Condenser	CO037	Process Water	Evaporator #11 Condenser
Evaporator #12	EV016	28, 42, 52	None
Evaporator #12 Heat Exchanger	HE135	28, 42, 52	None
Evaporator #12 Barometric Condenser	CO026	Process Water	Evaporator #12 Condenser
Evaporator #12 Hotwell	TA417	Process Water	None
Hot Pit #1	HP002	Process Water	Water Reclaim Hot Pit
Hot Pit #2	HP001	Process Water	Evaporator Hot Pit
Cold Pit	CT020	Process Water	None
#1 Cooling Tower	CT002	Process Water	#1 Reclaim Cooling Tower
#2 Cooling Tower	CT003	Process Water	#2 Reclaim Cooling Tower
#3 Cooling Tower	CT004	Process Water	#3 Reclaim Cooling Tower


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<u>Tank/Equipment Name</u>	Tank No.	Type of Service Phos Acid (%) or Other	Alternate Name(s)
#4 Cooling Tower	CT005	Process Water	#4 Reclaim Cooling Tower
#5 Cooling Tower	CT006	Process Water	#5 Reclaim Cooling Tower
#6 Cooling Tower	CT007	Process Water	#6 Reclaim Cooling Tower
#7 Cooling Tower	CT008	Process Water	#7 Reclaim Cooling Tower
#8 Cooling Tower	CT009	Process Water	#8 Reclaim Cooling Tower
22 Clarifier	TA179	42	42% Clarifier or 22 Tank
54 Clarifier	TA048	52	52% Clarifier or 54 Tank
Digester Scrubber System	SR030, BL0016, SK001	Fumes & Process Water	400 Scrubber
Tank 55	TA043	42	55 Tank or 42% Storage Tank
Tank 56	TA136	28,42,52,SPA Muds	56 Tank or Muds Tank
Tank 57	TA200	42,52,SPA Muds	57 Tank or SPA Muds Tank or HPA Tank
#1 IPC	TA109	28, 42, 52, Process Water, Equipment Washes	None
#2 IPC	TA110	28, 42, 52, Process Water, Equipment Washes	None
Belt Filter Scrubber System	SR004, TA203, TA059, BL018, SK001	Fumes & Process Water	None
Tank Farm Scrubber System	SR031, FL002, BL017, TA058	Fumes & Process Water	None
SPA Evaporator Feed Tank	TA141	52,SPA Muds	SPA Evap Feed Tank
SPA Evaporator #1	EV012	52, 69	None
SPA Evaporator #1 Heat Exchanger	HE127	52, 69	None
SPA Evaporator #1 Condenser	CO018	Process Water	SPA Evaporator #1 Surface Condenser
SPA Evaporator #1 Vacuum System	SR024, PU007	Process Water	None
SPA Evaporator #2	EV014	52, 69, 38, 62	Deflo #2 Evaporator
SPA Evaporator #2 Heat Exchanger	HE129	52, 69, 38, 62	Deflo #2 Evaporator Heat Exchanger


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<u>Tank/Equipment Name</u>	Tank No.	Type of Service Phos Acid (%) or Other	Alternate Name(s)
SPA Evaporator #2 Condenser	CO020	Process Water	SPA Evaporator #2 Surface Condenser; Deflo #2 Evaporator Condenser
SPA Evaporator #2 Vacuum System	SR047, PU019	Process Water	Deflo #2 Evaporator Vacuum System
SPA Evaporator #3	EV013	52, 69	None
SPA Evaporator #3 Heat Exchanger	HE128	52, 69	None
SPA Evaporator #3 Condenser	CO019	Process Water	SPA Evaporator #3 Surface Condenser
SPA Evaporator #3 Vacuum System	SR026, PU018	Process Water	None
SPA Effluent Tank	TA152	SPA Process Condensate, SPA Scrubber Blowdown	None
Oxidation Reactor	TA244	69	None
#1 Aging Tank	TA189	69	None
#2 Aging Tank	TA175	69	None
Filter Feed Tank	TA143	69	None
Aging Cooler #4	CJ010	69	None
Aging Cooler #3	CJ009	69	None
Aging Cooler #2	CJ008	69	None
Aging Cooler #1	CJ007	69	None
SPA #1 Filter Press	FP051	69	None
SPA #2 Filter Press	FP052	69	None
SPA Filter Product Tank	TA144	69	Filter Product Tank
Tank 8	TA217	69	None
Tank 9	TA218	69	None
Tank 8 Heater	HE102	69	None
Tank 9 Heater	HE103	69	None
SPA Deflo Mix Tank	TA158	38	Mix Tank




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<u>Tank/Equipment Name</u>	<u>Tank No.</u>	<u>Type of Service Phos Acid (%) or Other</u>	<u>Alternate Name(s)</u>
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Tank 52	TA047	52	52 Tank
Tank 53	TA046	52	53 Tank
SPA Re-Pulp Tank	TA145	SPA Muds	HPA Tank
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Tank 2	TA157	55	None
SPA Feed Tank	TA347	69	APP Feed Tank
MRC Filter Wash Tank	TA037	Process Water, Equipment Washes	MRC Filter Wash Can
19B Filter Wash Tank	TA198	Process Water, Equipment Washes	19B Filter Wash Can
Tank 18	TA401	Process Water, Equipment Washes	18 Tank
#1 Wash Water Tank	TA222	Process Water, Equipment Washes	1 Tank
Car Wash Tank	TA307	Equipment Washes	None
Receiving Tank 7	TA192	54, 69	Tank 7
Tank 7 Heater	HE210	54, 69	None
East Batch Tank	TA231	55	None
West Batch Tank	TA232	55	None
Deflo Heater	HE170	55	None
Deflo Scrubber System	SR041, TA233, TA241, TA242, BL089, SK002	Fumes & Process Water	None
DE Mix Tank	TA234	55	None
Deflo Product Cooler	CJ023	55	None
Entoleter Scrubber Seal Tank	TA184	Process Water	Entoleter Scrubber Tank
Entoleter Scrubber System	SR007, BL021, SK002	Fumes & Process Water	Granulation #3 Scrubber or G3 Scrubber



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<u>Tank/Equipment Name</u>	Tank No.	Type of Service Phos Acid (%) or Other	Alternate Name(s)
Feed Acid Tank	TA061	55	None
High Sped Mixer	MX046	Animal Feed Solution	None
Sump Tank	TA062	Equipment Washes, Process Water	None
Blunger	BN001	Animal Feed	None

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Line Name	Phos Acid Service (%)	From	To	Alternate Name(s)
Tank 57/Tank 56 to MRC/Digester Line	52/SPA Muds	Tank 57; Tank 56	MRC Clarifier; Digester	None
IPC Transfer Line	28, 42, 52, Process Water, Equipment Washes	IPC #1; IPC #2	Evaporators #2, 3, 4, 6, 8, 9, 10, 11, 12; 19B Clarifier; MRC Clarifier; 22 Clarifier; **PPA Stabilization Tank; Tank 50; Tank 51; Tank 52; Tank 53; 54 Clarifier; Tank 55; Tank 56; Tank 57; Granulation	IPC Line
Receiving Tank 7 to Tank 7 Heater Line	54	Receiving Tank 7	Tank 7 Heater	None
Rock Springs acid to Tank 7 Line	54, 69	Rock Springs sourced phosphoric acid railcar/truck unloading	Receiving Tank 7	None
Tank 7 to Tank 55 Line	54, 69	Receiving Tank 7; Rock Springs sourced phosphoric acid railcar/truck unloading	Tank 55	None
A & B 52% Transfer Lines	52	Tank 52; Tank 53	SPA Evaporator Feed Tank; railcar/truck loading	None
G1 Muds Transfer Line	52/SPA Muds	Tank 56; Tank 57	Granulation #1; Granulation #2	None





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Line Name	Phos Acid Service (%)	From	To	Alternate Name(s)
G2 Muds Transfer Line	52/SPA Muds	Tank 56; Tank 57	Granulation #1; Granulation #2	None
G1 42% Transfer Line	42	Tank 55	Granulation #1; Granulation #2	None
G2 42% Transfer Line	42	Tank 55	Granulation #1; Granulation #2	None
28% Transfer Line	28	Tank 50; Tank 51	G1 & G2 28% Acid Transfer Line; Tank 55; Tank 57	None
G1 & G2 28% Acid Transfer Line	28	28% Transfer Line	Granulation #1; Granulation #2	None
Tank 52 Line to Muds Lines	52	Tank 52	G1 Muds Transfer Line; G2 Muds Transfer Line	None
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]



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Line Name	Phos Acid Service (%)	From	To	Alternate Name(s)
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
APP SPA Transfer Line	69	Tank 8; Tank 9	APP	None
SPA Re-Pulp Transfer Line	SPA Muds	SPA Re-Pulp Tank	SPA Evaporator Feed Tank; Tank 57; Tank 56; Tank 57/Tank 56 to MRC/Digester Line	None
Tank 2 Discharge Line	55	Tank 2	Railcar/truck loadout; #6 Tank	None
SPA Evaporator Feed Tank to SPA Evaporator(s) Line(s)	52	SPA Evaporator Feed Tank	SPA Evaporator #1; SPA Evaporator #2; SPA Evaporator #3	None
SPA Evaporator(s) Product Line(s)	52, 69	SPA Evaporator #1; SPA Evaporator #2; SPA Evaporator #3	Oxidation Reactor; SPA Evaporator Feed Tank	None
Oxidation Reactor to 1 <sup>st</sup> Stage Aging Tank Line	69	Oxidation Reactor	1 <sup>st</sup> Stage Aging Tank	None


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Line Name	Phos Acid Service (%)	From	To	Alternate Name(s)
1 <sup>st</sup> Stage Aging Transfer Line(s)	69	1 <sup>st</sup> Stage Aging Tank	2 <sup>nd</sup> Stage Aging Tank; Aging Coolers; Filter Feed Tank; SPA Evaporator Feed Tank; SPA Evaporator #1; SPA Evaporator #2; SPA Evaporator #3	None
2 <sup>nd</sup> Stage Aging Transfer Line(s)	69	2 <sup>nd</sup> Stage Aging Tank	Aging Coolers; Filter Feed Tank	None
SPA Filter Feed Line(s)	69	Filter Feed Tank	Aging Coolers; SPA #1 Filter Press; SPA #2 Filter Press	None
SPA Filter Product Line(s)	69	SPA #1 Filter Press; SPA #2 Filter Press	SPA Filter Product Tank	None
SPA Filter Product Tank Transfer Line(s)	69	SPA Filter Product Tank	Tank 8; Tank 9; Filter Feed Tank; Car Wash Transfer Line	None
SPA Loadout Line(s)	69	Tank 8; Tank 9	Tank 8 Heater; Tank 9 Heater; railcar/truck loadout	None
SPA Deflo Mix Tank Feed Line	69	Rock Springs sourced phosphoric acid railcar/truck unloading	SPA Deflo Mix Tank	None
SPA Deflo Mix Tank to SPA Evaporator #2 Line	38	SPA Deflo Mix Tank	SPA Evaporator #2	None
SPA Evaporator #2 Deflo Product Line(s)	62, 55	SPA Evaporator #2	SPA Deflo Dilution Tank; Tank 2; #6 Tank; railcar/truck loadout	None
SPA Deflo Dilution Transfer Line(s)	55	SPA Deflo Dilution Tank	SPA Deflo Dilution Cooler; #6 Tank; railcar/truck loadout	None
#6 Tank Transfer Line(s)	55	#6 Tank	Railcar/truck loadout; SPA Deflo Mix Tank; Tank 2	None



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Line Name	Phos Acid Service (%)	From	To	Alternate Name(s)
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Rock Springs Acid to East and West Batch Tanks	54, 69	Rock Springs phosphoric acid railcar/truck unloading line and Receiving Tank 7 Transfer Line at Tank 55 Connection	East Batch Tank; West Batch Tank	None
East and West Batch Tank Transfer Line(s)	55	East Batch Tank; West Batch Tank	Deflo Heater; Deflo Product Cooler; DE Mix Tank; Feed Acid Tank	None
Deflo Product Cooler to Tank 2 Line	55	Deflo Product Cooler	Tank 2	None
Sump Tank to Feed Acid Tank Line	Process Water	Sump Tank	Feed Acid Tank	None
Feed Acid Tank to High Speed Mixer Line	55	Feed Acid Tank	High Speed Mixer	None
High Speed Mixer to Blunger Line	Animal Feed Solution	High Speed Mixer	Bunger	None

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Sump Name	No.	Area serviced	Pumped To	Alternate Name(s)
#1 Sump	SU001	Belt Filters/ Evaporators	MRC Filter Wash Tank, Tank 18, or Gyp Launder	None
#2 Sump	SU002	#2, #3, #4, #6 Evaporators/ Tank Farm	MRC Filter Wash Tank or Tank 18	None


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Sump Name	No.	Area serviced	Pumped To	Alternate Name(s)
#3 Sump	SU003	PPA Process/Belt Filter Scrubber	MRC Filter Wash Tank, Tank 18, or Solids Transfer Tank	PPA #3 Sump
#4 Sump	SU004	Tank Farm/Tank 18/Digester Scrubber	MRC Filter Wash Tank, 19B Filter Wash Tank, or Tank 18	None
#5 Sump	SU005	Digester/Tank Farm/PPA Stabilization/#1 Wash Water Tank	MRC Filter Wash Tank or Tank 18	None
#6 Sump	SU010	SPA Process and Phosphoric acid loading docks	SPA Wash Water Tank or SPA Re-Pulp Tank	SPA #6 Sump
#7 Sump	SU009	Tanks 6, 7, 8, and 9; Unloading area for Rock Springs sourced acid	#6 Sump	6 & 7 Tank Sump
#8 Sump	SU006	Tank 53, 55, 56, and 57	MRC Filter Wash Tank or Tank 18	None
#9 Sump	SU007	#4 Belt Filter	MRC Filter Wash Tank or Tank 18	None
#10 Sump	SU021	Tank 56 & Tank 57	Tank 56 & Tank 57	Tank 56 & 57 Sump
Car Wash Sump	SU008	Rail Car Wash	Car Wash Tank	None
SPA North Sump	SU026	SPA Process	FCC Tank/Gyp Lauder	North Sump
Ore Wash Pad Sump	SU015	Ore Slurry Storage Tanks & Phos Acid and Gyp Stack Equipment Wash Pad	Gyp Launder/ Ore Slurry Dome	Wash Pad Sump or Slurry Wash Sump
Granulation #2 Sump	SU013	Granulation #2	Granulation #2 Effluent Tank	G2 Sump
Sulfate Sump	SU020	Sulfate Plant	Sulfate Fines Tank or Wastewater Reuse Facility	None
#33 Tank Sump	SU019	Tank 33	Tank 33	Tank 33 Sump



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Sump Name	No.	Area serviced	Pumped To	Alternate Name(s)
Granulation #3 Sump	SU011	Granulation #3	Gyp Launder	G3 Sump
Deflo Scrubber Sump	SU012	Deflo Scrubber	Granulation #3 Sump	None
Deflo Batch Tank Sump	SU012	Deflo East and West Batch Tanks and Deflo Feed Acid Tank	#1 Sump or Gyp Launder	None



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Figure 3: Don Plant Overall Phosphoric Acid Production Process (\*\*PPA portion is Confidential Business Information\*\*)

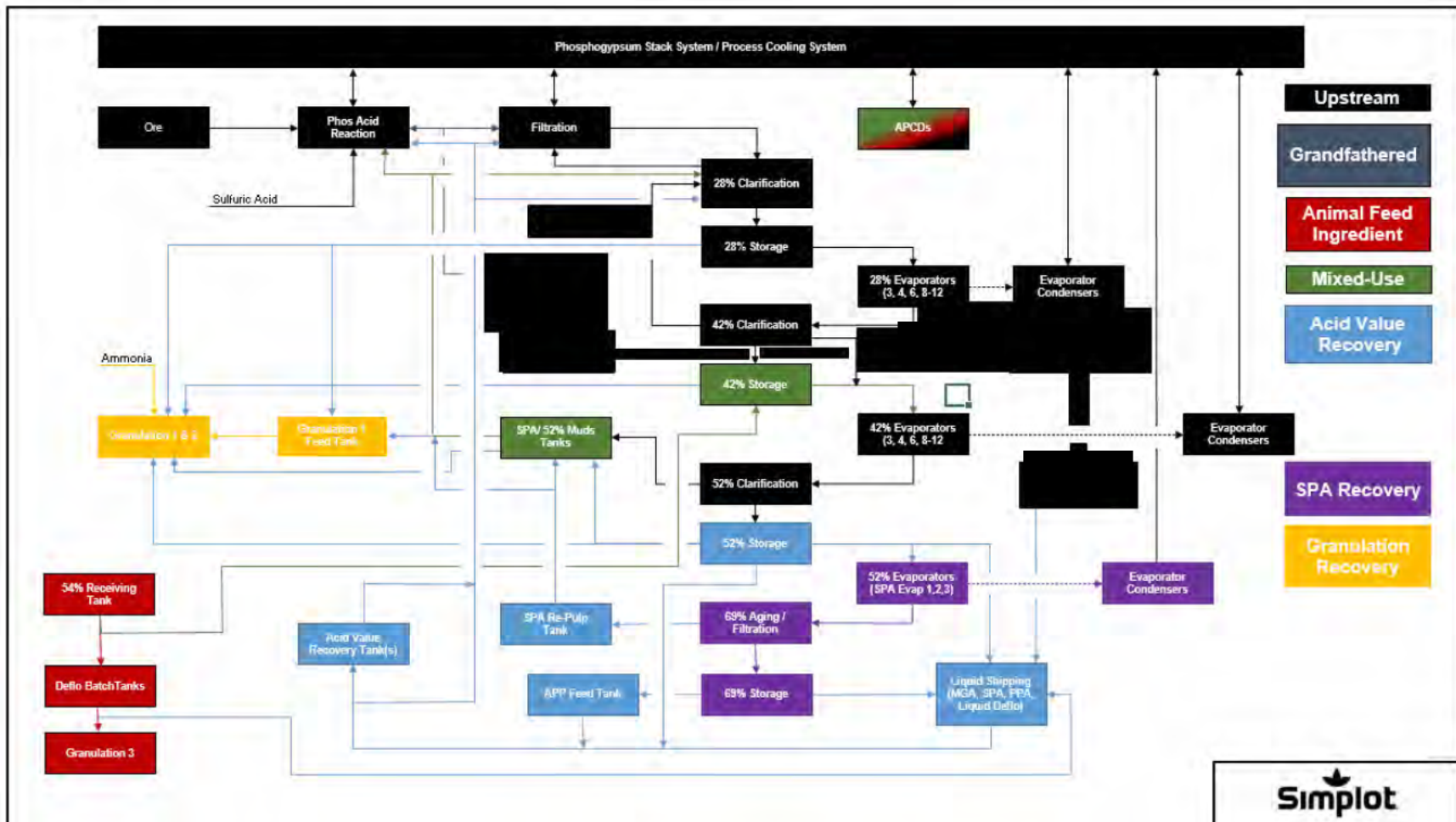






Figure 4:  **\*\*Confidential Business Information\*\***

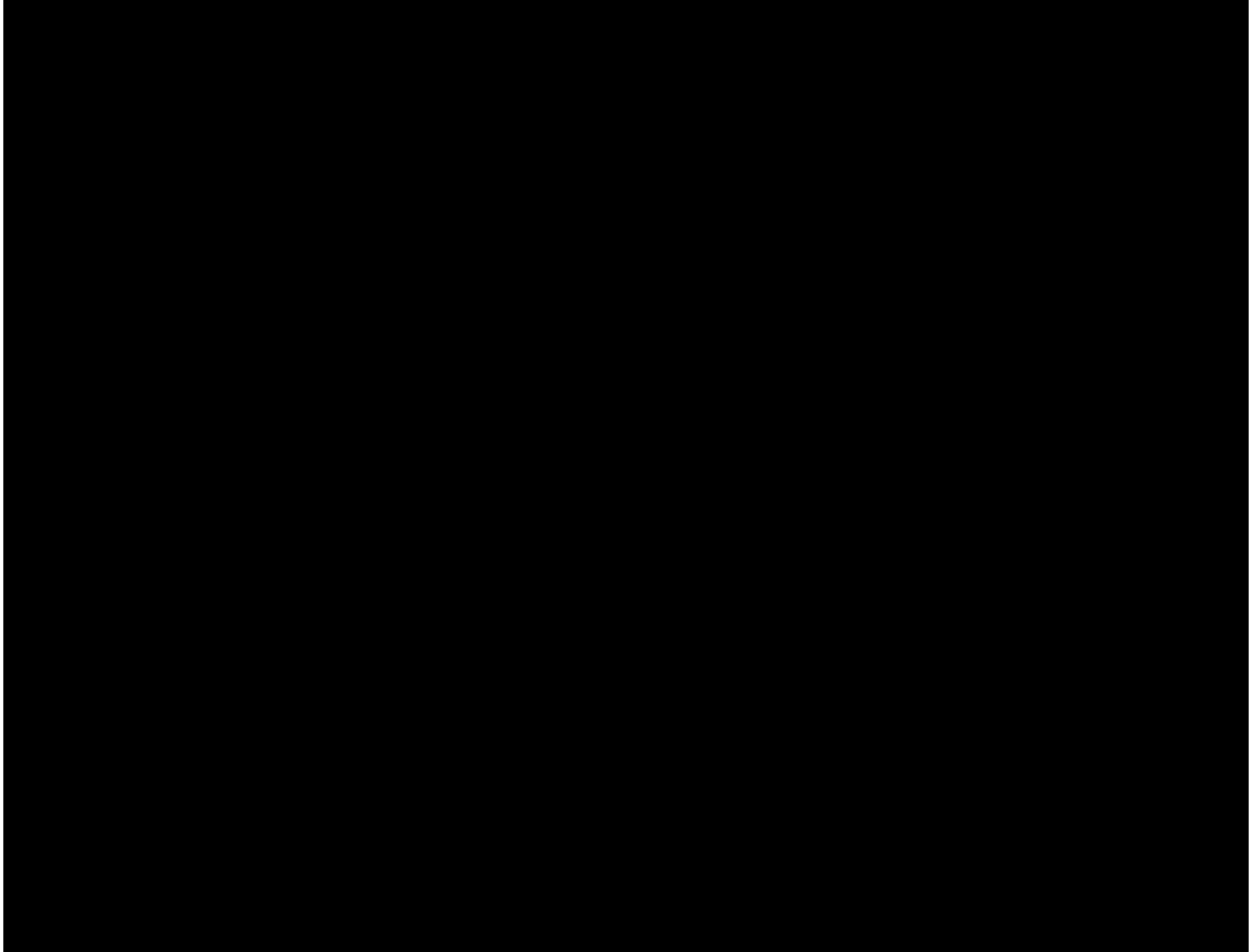




Figure 5:  **\*\*Confidential Business Information\*\***

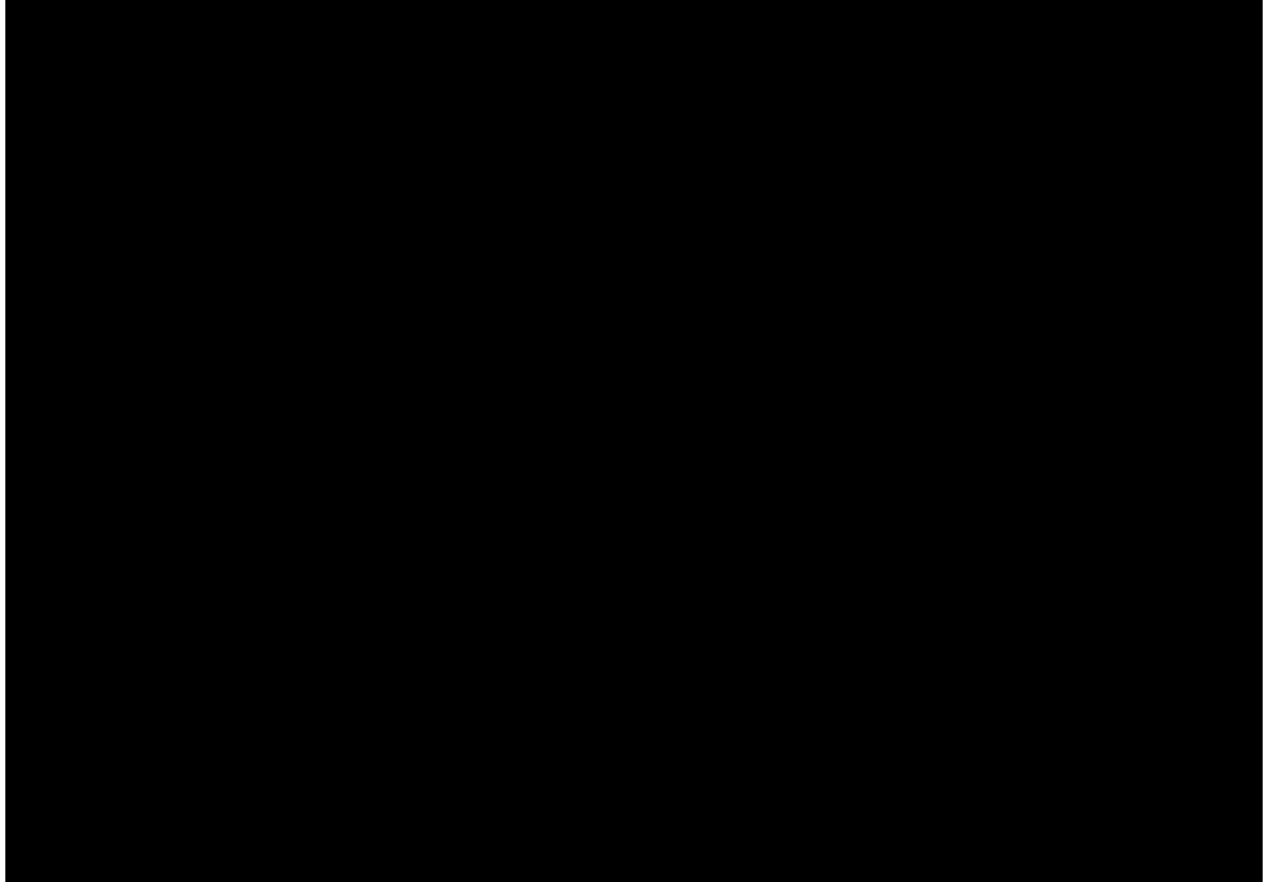
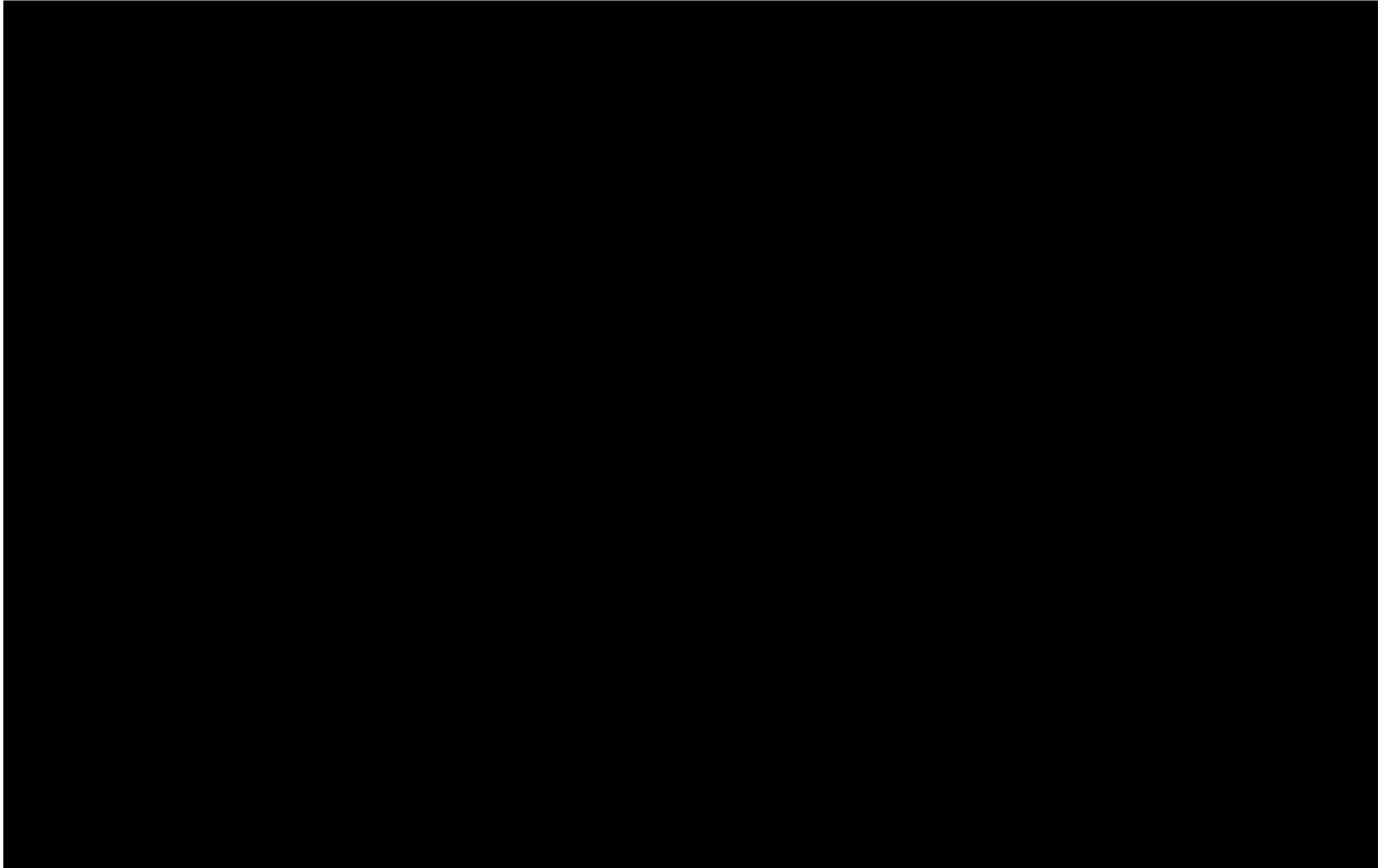




Figure 6:  **\*\*Confidential Business Information\*\***



**Figure 7: Acid Transfer from Phosphoric Acid Plant to Granulation<sup>13</sup>**

**Table 1: Acid Transfer from Phosphoric Acid to Granulation Line Details**

Service	Name	Description	Cleaning Frequency	Est. Length (ft) <sup>14</sup>
42% Acid	G1 42% Transfer Line	Transfers 42% acid from Tank 55 to Granulation #1 and/or Granulation #2 Plant(s)	As needed	660
42% Acid	G2 42% Transfer Line	Transfers 42% acid from Tank 55 to Granulation #1 and/or Granulation #2 Plant(s)	As needed	1100
28% Acid	G1 & G2 28% Transfer Line	Transfers 28% acid from Tank 50 and/or Tank 51 to Granulation #1 and/or Granulation #2 Plant(s)	As needed	910
28% Acid	28% Transfer Line	Transfers 28% acid from Tank 50 and/or Tank 51 to Tank 55, Tank 57, or G1 & G2 28% Transfer Line	As needed	480

<sup>13</sup> AVR: Acid Value Recovery

<sup>14</sup> The lengths listed in this chart are estimates based on interpreting Google images and including a 20% factor (ft) for estimating vertical runs. The actual lengths may differ.

**Figure 8: Muds & 52% Acid Transfer from Phosphoric Acid Plant to Granulation<sup>15</sup>**

**Table 2: Muds and 52% Acid Transfer between the Phosphoric Acid Plant and Granulation Line  
Details**

Service	Name	Description	Cleaning Frequency	Est. Length (ft) <sup>16</sup>
Phosphoric Acid Muds/ 52% Acid	G1 Muds Transfer Line	Transfers muds and/or 52% acid from Tank 56 and/or Tank 57 to the Granulation #1 and/or Granulation #2 Plant(s)	As needed	580
Phosphoric Acid Muds/ 52% Acid	G2 Muds Transfer Line	Transfers muds and/or 52% acid from Tank 56 and/or Tank 57 to the Granulation #1 and/or Granulation #2 Plant(s)	As needed	910
52% Acid	Tank 52 Transfer Line	Transfers 52% acid from Tank 52 to the G1 Muds Transfer Line and/or the G2 Muds Transfer Line	As needed	410
Phosphoric Acid Muds/ 28% Acid/ 42% Acid/ 52% Acid	IPC Transfer Line	Transfers 28% acid, 42% acid, 52% acid, muds, and/or wash water to and from Phosphoric Acid Plant equipment and storage tanks and/or transfers 42% acid to the PPA Feed Line	As needed	1200

Figure 9: Acid Transfer between the Phosphoric Acid Plant, Truck and Rail Loadout, and SPA Evaporator Feed Tank<sup>17</sup>



<sup>15</sup> AVR: Acid Value Recovery

<sup>16</sup> The lengths listed in this chart are estimates based on interpreting Google images and including a 20% factor (ft) for estimating vertical runs. The actual lengths may differ.

<sup>17</sup> AVR: Acid Value Recovery

**Table 3: Acid Transfer between the Phosphoric Acid Plant, Truck and Rail Loadout, and SPA Evaporator Feed Tank Line Details**

Service	Name	Description	Cleaning Frequency	Est. Length (ft) <sup>18</sup>
52% Acid	A 52% Transfer Line	Transfers 52% acid from Tank 52 to Truck Loadout, the Railcar Loadout Line, and to SPA Evaporator Feed Tank	As needed	1100
52% Acid	B 52% Transfer Line	Transfers 52% acid from Tank 53 to Truck Loadout, the Railcar Loadout Line, and to SPA Evaporator Feed Tank	As needed	950
52% Acid	Railcar Loadout Line	Transfers 52% acid from the A 52% Transfer Line and/or the B 52% Transfer Line to railcars for acid loadout	As needed	450

**Figure 10: Semi-Segregable Areas**



<sup>18</sup> The lengths listed in this chart are estimates based on interpreting Google images and including a 20% factor (ft) for estimating vertical runs. The actual lengths may differ.

Figure 11: Predominately Containable Impervious Areas



Figure 12: Containable and Non-Impervious Areas

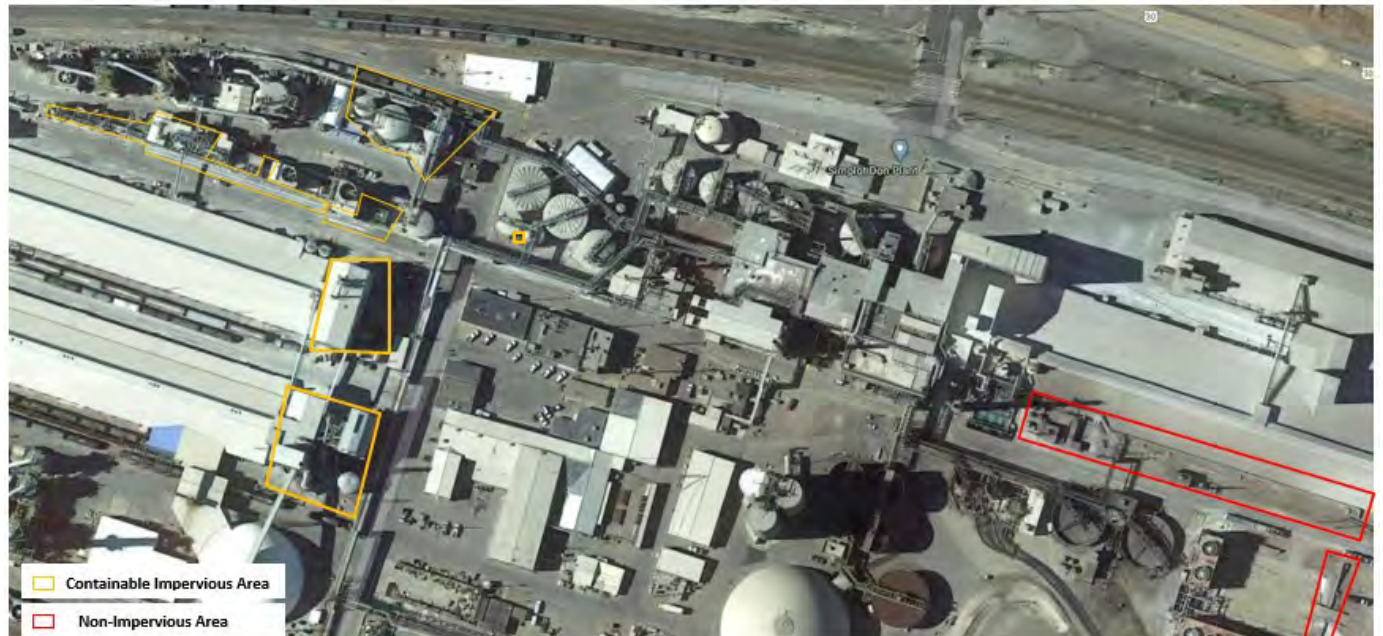




Figure 13: Phosphoric Acid and AFI Plants Battery Limits



## Appendix 5

### Best Management Practices (BMP) Plan



Appendix 5.A  
Minimizing and Addressing Spills and Leaks

Don Plant  
Final

May 12, 2022

**BMP-Minimizing and Addressing Spills and Leaks  
Simplot Don Plant**

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**Introduction**

Simplot has developed Appendix 5: Best Management Practices Plan (hereinafter either “BMP” or “Plan”) to reduce unintended inputs<sup>1</sup> of phosphoric acid, sulfuric acid, and nitric acid to Process Wastewater entering the Phosphogypsum Stack System. Where possible, Simplot will capture and reuse these materials. The BMP excludes equipment cleaning practices; these are addressed in Section VI: Compliance Projects of the Facility Report. This Plan also addresses other chemicals used at the facility to ensure proper management and reduce unintended releases of these materials to the environment.

Through the BMP, Simplot has established procedures to address the management, tracking, and reporting of phosphoric acid, sulfuric acid, and nitric acid leaks<sup>1</sup> and spills<sup>1</sup> for its fertilizer production facilities in Pocatello, Idaho; in areas of the phosphoric acid plant (post first-stage filtration, e.g., belt filters), including acid clarification and evaporation, and in the granulation plants. The specific details of the BMP for the phosphoric acid and granulation plants are discussed in the Sections that follow and the referenced Attachments. Where noted, certain BMP procedures are dependent upon the commencement of operation of the compliance projects set forth in Appendix 6 (Project Narrative & Compliance Schedules) to the Consent Decree.

All capitalized terms and/or acronyms not otherwise defined in this Appendix shall have the meaning set forth in the Consent Decree.

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<sup>1</sup> For purposes of this BMP document: “unintended inputs,” “leaks, and “spills” are synonymous and mean accidental or unplanned escape of process streams (i.e., acid or cleaning solution) from the primary container, conveyance piping, valves, flanges, and/or pumps onto impervious surfaces with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) or onto non-impervious surfaces.

## 1 Containment of Phosphoric Acid Production and Animal Feed Ingredient Production (AFIP) Related Spills and Leaks

### 1.1 Semi-Segregable Areas (Figure 1)

For the semi-segregable area (“Semi-Segregable Areas”) sumps, Process Wastewater has flows through the sump in the range of 50-150 gpm depending upon circumstance. The normal flow path for the sumps in these areas will be to the Phosphogypsum Stack System.

#### 1. SPA North Sump Area

Due to the engineered slope of the concrete pad in the SPA North Sump area and the configuration of the Phosphoric Acid Plant, spills and leaks of phosphoric acid and nitric acid onto the concrete pad will flow to the sump and mix with the Process Wastewater being pumped from the sump. If high acid content is detected by an acid content monitoring instrument, then the entire flow from the sump will be diverted for recovery in accordance with the BMP.

#### 2. Granulation #3 Sump Area

Due to the engineered slope of the concrete pads in the Granulation #3 and Deflo Scrubber areas and the configuration of the Granulation #3 Plant, spills and leaks of phosphoric acid and limestone onto the concrete pads will flow to the sumps and mix with the Process Wastewater being pumped from the sumps. If high acid content is detected by an acid content monitoring instrument in the Granulation #3 Sump, then the sump pump will be shutdown to allow for recovery of the spilled material in accordance with the BMP.

#### 3. Deflo Batch Tank Sump Area

Due to the engineered slope of the concrete pads in the Deflo Batch Tank area and the configuration of the DE Deflo Plant, spills and leaks of phosphoric acid and limestone onto the concrete pads will flow to the sump and mix with the Process Wastewater being pumped from the sump. If high acid content is detected by an acid content monitoring instrument in the common discharge line of the sump and Sump Tank, then the sump and Sump Tank pump will be shut down or diverted to allow for recovery of the spilled material in accordance with the BMP.

There are some areas in the phosphoric acid area that are not concrete, and they are shown with redlines in Figure 2. The non-concrete areas are designated as

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“Other Areas” such that spills and leaks in these areas must be managed in accordance with RCRA and any other applicable law.

Figure 1: Semi-Segregable Areas



## 1.2 Containable Impervious Areas (Figure 2)

1. #6 Sump Area
2. #7 Sump Area
3. #10 Sump Area
4. Car Wash Sump Area

Spills and leaks of phosphoric acid, sulfuric acid, and nitric acid onto impervious areas designated by yellow lines in Figure 2 (“Containable Impervious Areas”) must be separately contained, and then recovered in accordance with the BMP. The foregoing shall not relieve Simplot of its obligations to manage any spills and leaks under RCRA or any other applicable law.



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Figure 2: Containable Impervious Areas and Non-impervious areas (“other areas”)



### 1.3 Predominately Containable Impervious Areas (Figure 3)

1. #1 Sump Area
2. #2 Sump Area
3. #3 Sump Area
4. #4 Sump Area
5. #5 Sump Area
6. #8 Sump Area
7. #9 Sump Area
8. Ore Wash Pad Area

For the Predominately Containable area sumps, large volumes of Process Wastewater, cleaning wastes or other materials that are associated with Upstream and/or Mixed-Use Units, and/or non-hazardous aqueous cleaning solution (NHACS) wastes are handled within the sump on a non-routine basis. The normal flow path for the sumps in these areas will be to the Acid Value Recovery System. During the large volume non-routine events identified in Section 1.3.1 below, the sump will be directed to the Phosphogypsum Stack System after a 2-minute flush of the sump to the Acid Value Recovery System. In certain non-routine situations as described in Section 1.3.1 of this Appendix, specific Acid Value Recovery Units and/or specific equipment cleaning practices will be shut down when the sump is directed to the Phosphogypsum Stack System.

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**1.3.1 Non-Routine Situation Details**

At the Don Plant there are a few known potential non-routine events that can occur within the Predominately Containable Impervious Areas and the following information will describe how these non-routine events will be handled.

**1.3.1.1 Phosphoric Acid Plant Scrubber Upset**

If an extended upset occurs with one of the Phosphoric Acid Plant Scrubbers and Phosphoric Acid Plant production management decides to send this Process Wastewater to the Phosphogypsum Stack System, then flow to the Q-jet header<sup>2</sup> will be shut down before the affected sumps are directed to the Phosphogypsum Stack System.

**1.3.1.2 Power Outage/Blip**

If the Phosphoric Acid Plant experiences a power outage or power blip, causing a large volume of Process Wastewater to inundate the Predominately Containable Impervious Area sump(s), and Phosphoric Acid Plant production management decides to send this Process Wastewater to the Phosphogypsum Stack System, then flow to the Q-jet header will be shut down before the affected sumps are directed to the Phosphogypsum Stack System.

**1.3.1.3 Phosphoric Acid Plant Spray Pit or #1 Hot Pit Launder Upset**

If an extended upset occurs with one of the Phosphoric Acid Plant belt filter spray pits or the #1 Hot Pit Launder and Phosphoric Acid Plant production management decides to send this Process Wastewater to the Phosphogypsum Stack System, then flow to the Q-jet header will be shut down before the affected sumps are directed to the Phosphogypsum Stack System.

**1.3.1.4 Phosphoric Acid Plant Flocculent Day Tank Overflow**

If one of the Phosphoric Acid Plant flocculent day tanks overflows and Phosphoric Acid Plant production management decides to send the contents of the flocculent tank to the Phosphogypsum Stack System, then #3 Sump will be

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<sup>2</sup> The Q-jet header provides wash solution to equipment within the phosphoric acid plant. The wash solution in the Q-jet header will be primarily Acid Value Recovery Tank Effluent, meaning when applicable sumps in Predominately Containable Impervious Areas are directed to the Phosphogypsum Stack System the Q-jet header will be shutdown to limit the potential of leaks and spills of Acid Value Recovery Tank Effluent reporting to the Phosphogypsum Stack System.

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directed to the Phosphogypsum Stack System until the solution has been drained from the area.

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Figure 3: Predominately Containable Impervious Areas



#### 1.4 Other Areas (Figure 2)

Any leak or spill of a hazardous material, including phosphoric acid, sulfuric acid, and nitric acid, that is not contained within the Containable Impervious Areas, Semi-Segregable Areas, or Predominately Containable Impervious Areas of the plant will be managed in accordance with RCRA and any other applicable law.

## **2 Phosphoric Acid and AFIP Plants Leak / Spill Detection Systems and Response Procedures**

### 2.1 General

Simplot will implement two approaches to increase the likelihood of detecting non-segregable acid leaks, spills, and process upsets: operator/supervisor inspections and acid content monitoring in Semi-Segregable Area sumps. While acid content monitoring is exclusive to Semi-Segregable Areas, operator inspections also serve to identify observable leaks and spills of acids regardless of the area of the plant where they occur – Semi-Segregable, Contained Impervious, Predominately Containable Impervious, or outside Contained Impervious Areas (“Other Areas”).

### 2.2 Release Reporting

Simplot personnel are responsible for notifying the appropriate management personnel immediately upon identifying a leak or spill of any hazardous material listed in Attachment A, Table 1- BMP Actionable Volumes (hereinafter, “Table 1 Materials”) with a reasonable potential to reach or exceed the BMP Actionable

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Volume (Table 1) pursuant to this BMP. This BMP does not relieve Simplot of its obligation to comply with any federal, state, or local laws applicable to hazardous materials releases to the environment.

### 2.3 Inspections

Operators/supervisors will visually inspect sump areas for leaks and/or spills of phosphoric acid, sulfuric acid, and nitric acid during their normal rounds a minimum of twice per shift (2 shifts per day) and document the inspection findings. A leak or spill, as referenced throughout this BMP, is defined as an accidental or unplanned release of Table 1 Materials from the primary container, conveyance piping, valves, flanges, and/or pumps with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) within a 24-hour period and/or which triggers the alarm limits for the acid content monitoring system on key outgoing sumps in Semi-Segregable Areas. The operator will attempt to correct leaks from valves, flanges, pumps, or any other equipment that can be readily and safely corrected at the time of discovery. The incident(s) will be reported to management for further action and recorded in the tracking database for future reference. Reporting responsibilities are outlined in Simplot's Spill Reporting Policy and Procedure.

### 2.4 Acid Content Monitoring System Description: Semi-Segregable Spills / Leaks

The Don Plant facility will monitor the Semi-Segregable Areas (see Attachment B) with an acid content monitoring system to enable the continuous detection of changes in acid content that indicate occurrence of detectable acid leaks and spills. The semi-segregable sump, the tank receiving the sump material, and/or the discharge line from the sump or tank will have a measurement device to continuously measure the acid content of the Process Wastewater being pumped from the sump or tank as shown in Attachment B of this Plan. The Deflo Scrubber Sump is pumped to the Granulation #3 Sump and will rely on acid content monitoring in the Granulation #3 Sump. The Deflo Batch Tank Area Sump is pumped to the Sump Tank and/or directly to the Phosphogypsum Stack System and will rely on acid content monitoring in the common discharge line to the Phosphogypsum Stack System from the Deflo Batch Tank Area Sump and the Sump Tank. The acid content monitoring of the return Process Wastewater stream from the Semi-Segregable sumps and the Sump Tank will be displayed on the operators' distributive control system (DCS) (see Attachment B of this Plan for an example).

Acid leaking or spilling into a Semi-Segregable sump stream will increase the acid content of the aqueous water stream within and exiting the sump. Alarms will be

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triggered if the acid content increases beyond the set alarm limits for a 2-minute interval. For the SPA North Sump upon triggering of such an alarm, the sump will be automatically switched to recovery (see Attachment B) by the DCS once the alarm sounds and the area around the measurement device will be investigated. For the Deflo Batch Tank Sump, Sump Tank, and the Granulation #3 Sump upon triggering of such an alarm, the sump and/or Sump Tank discharge pump will be automatically shut down and/or diverted for recovery once the alarm sounds and the area will be investigated. Acid from the Deflo Batch Tank Sump and the Granulation #3 Sump will be recovered via pump or vacuum truck to a tank containing the same chemical or to the Acid Value Recovery System. After the acid content within the Semi-Segregable Area reduces below the alarm threshold for a 2-minute interval, the Process Wastewater flow from the Semi-Segregable sump will be automatically reverted to discharge back to the Phosphogypsum Stack System by the DCS. The location of the acid content monitoring devices are found in Attachment B of this Plan.

Individual measurement devices will alarm based on the preliminary trigger value set for the device found in Attachment B of this Plan.<sup>3</sup> The target shown in Attachment B of this Plan is the preliminary target for Don Plant. Pursuant to Section 7: BMP Performance Standards, Simplot will monitor the devices at the Don Plant for a year after starting from the date of completion of the applicable compliance project in Appendix 6 (RCRA Project Narrative and Compliance Schedule) to the Consent Decree, to ensure the setting is correct for alerting operations to leaks and spills within the limits of the device when properly operated and calibrated. Simplot will notify EPA when the one-year monitoring period begins. After the one (1) year period, Simplot will notify EPA of the results and monitoring will continue.

When an alarm triggers, the operator will inspect that area of the plant for any problems and take appropriate measures to stop or minimize the release and minimize further impacts (see Attachment B of this Plan).

The acid content measurement system will be maintained in accordance with specific manufacturer recommendations or acceptable industrial practices and updated as needed. Devices will be checked based on type, at least monthly for pH and/or conductivity and quarterly for nuclear density meters. Devices will also be checked during any instrument error readings and calibrated if necessary. The calibration dates and alarm limit will be documented in the maintenance

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<sup>3</sup> Trigger values will be developed as described in Appendix B.

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management system that is in place at the time. Maintenance and calibration procedures are found in Attachment B of this Plan.

## 2.5 Tracking / Recording

A tracking database software (currently Enablon)<sup>4</sup> will be used to track leaks and spills of Table 1 Materials with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) within any rolling 24-hour period and the remedial measures taken to address these leaks and spills. The area management, engineering, and environmental departments will use the maintenance management system to ensure the prompt and proper execution of corrective actions. When plant personnel identify a leak or spill of Table 1 Materials with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) within any rolling 24-hour period, appropriate corrective actions will be taken as outlined below. A record of the incident will be entered within 24 hours of the incident into the tracking database software to log and track leaks and spills of Table 1 Materials. Supervisors will be trained to enter incidents into the tracking database software. The tracking database software tracks specific information including date and time of release, date and time of report, a description of the incident, volume of the material, type of material, and additional supporting information. Simplot personnel are responsible for notifying the appropriate management personnel immediately upon the identification of a leak or spill.

## 2.6 Reporting, Recovery, and Corrective Actions

Management and environmental staff will be notified immediately of leaks or spills with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) to verify the volume of the leak or spill and ensure that it is properly reported, documented, and corrected pursuant to this BMP. The tracking database software will be used to track leaks and spills of Table 1 Materials with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) within any rolling 24-hour period and the immediate actions taken to address the leak or spill. The area management, engineering, and environmental departments will use the maintenance management system to ensure the prompt and proper execution of corrective actions.

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<sup>4</sup> If problems develop using the Enablon software for the tracking/recording required in Appendices 5A and 5B, an alternative tracking/recording method will be put in place.

**BMP-Minimizing and Addressing Spills and Leaks  
Simplot Don Plant****2.6.1 Semi-Segregable Areas of the Phosphoric Acid Plants****2.6.1.1 Reporting**

A leak or spill of a Table 1 Material into a Semi-Segregable Area, with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) within any rolling 24-hour period, which is detected as a result of visual inspections, alarms, or acid content monitoring must be logged into the tracking database software. See Section 2.6.1.2: Corrective Actions, below.

Appropriate management and environmental staff will be notified, and the leak or spill will be properly reported, documented, and corrected pursuant to this BMP.

**2.6.1.2 Recovery and Corrective Actions**

A leak or spill of a Table 1 Material into a Semi-Segregable Area, with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) within any rolling 24-hour period, which is detected as a result of visual inspections, alarms, or acid content monitoring will be recovered back to a tank containing the same chemical or input into the Acid Value Recovery System, described in Section 4: Recovery System Operation for Spill and Leak Recovery, of this BMP. If unrecoverable due to large volumes of Process Wastewater in the same area or there is a reasonable potential the volume of material pumped to the Phosphogypsum Stack System before the system started collecting reached or exceeded the BMP Actionable Volume, then Simplot will notify the agencies of the release in accordance with the Consent Decree. If the volume pumped to the Phosphogypsum Stack System did not reasonably reach or exceed the BMP Actionable Volume, the leak or spill only needs to be recorded in the tracking database and not reported to the agencies. Upon triggering of an alarm in these areas, Simplot will take the following measures:

1. Investigate potential release sources.
2. Address any issues found.
  - a. Stop the release if possible, such as by flow diversion or by closing the release gate.
  - b. Generate a work order if needed to correct the issue.
3. Document the release in the tracking database software.
4. Report the release to agencies pursuant with the Consent Decree.



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This BMP does not relieve Simplot of its obligation to comply with any federal, state, or local laws applicable to hazardous materials releases to the environment.

## 2.6.2 Containable Impervious Areas

### 2.6.2.1 Reporting

A leak or spill of a Table 1 Material with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) into a Containable Impervious Area, as described in the Don Plant Facility Report, must be logged into the tracking database software and made available to inspectors upon request, but does not need to be reported to the EPA if recovered to a tank containing the same chemical or the Acid Value Recovery System, described in Section 4: Recovery System Operation for Spill and Leak Recovery, of this BMP.

### 2.6.2.2 Recovery and Corrective Actions

A leak or spill of a Table 1 Material with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) into a Containable Impervious Area, will be recovered back to a tank containing the same chemical or input into the Acid Value Recovery System via sump pump, vacuum truck, or other means. If unrecoverable due to contamination or location of the spill, the material must be managed in compliance with the applicable RCRA Requirements. This BMP does not relieve Simplot of its obligation to comply with any other federal, state, or local laws applicable to such a leak or spill.

## 2.6.3 Predominately Containable Impervious Areas

### 2.6.3.1 Reporting

A leak or spill of a Table 1 Material with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) into a Predominately Containable Impervious Area, as described in the Don Plant Facility Report, must be logged into the tracking database software and made available to inspectors upon request, but does not need to be reported to the EPA if recovered to a tank containing the same chemical or the Acid Value Recovery System, described in Section 4: Recovery System Operation for Spill and Leak Recovery, of this BMP.

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**2.6.3.2 Recovery and Corrective Action**

A leak or spill of a Table 1 Material with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) into a Predominately Containable Impervious Area, will be recovered back to a tank containing the same chemical or input into the Acid Value Recovery System via sump pump, vacuum truck, or other means. If unrecoverable due to large volumes of Process Wastewater in the same area, then Simplot will notify the agencies of the release in accordance with the Consent Decree and manage the material in accordance with the non-routine situations described in Section 1.3 Predominately Containable Impervious Area above. This BMP does not relieve Simplot of its obligation to comply with any other federal, state, or local laws applicable to such a leak or spill.

**2.6.4 Other Areas****2.6.4.1 Reporting**

All reasonable measures shall be taken to avoid releases of Table 1 materials outside of plant containment areas. In the event of a release, Simplot must comply with the appropriate federal, state, or local laws applicable to such a release. A leak or spill of a Table 1 Material with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) must be recorded in the tracking database software and reported pursuant to the Consent Decree.

**2.6.4.2 Corrective Actions**

All reasonable measures shall be taken to avoid releases of Table 1 materials outside of plant containment areas. In the event of such a release, Simplot must comply with the appropriate federal, state, or local laws applicable to such a release.

**2.7 Production Department Responsibilities**

The Phosphoric Acid Production Department personnel will be responsible for troubleshooting and correcting process upsets that result in a leak or spill. The operator covering the plant at which the upset occurs will notify his or her supervisor and begin taking immediate action. The appropriate manager or supervisor will enter a leak or spill in the tracking database software.

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**2.8 Maintenance Department Responsibilities**

The Maintenance Department personnel will be responsible for repairs and maintenance to faulty equipment. If the leak or spill is the result of a mechanical failure, then the appropriate operations personnel shall notify the Maintenance Department of the condition and a work order request for correction of the problem is initiated. The Maintenance Department will be responsible for timely completion of leak repairs. Maintenance work order requests and their status are tracked in a computerized maintenance management system.

**3 Containment of Ammonium Phosphate Granulation Production Related Spills and Leaks****3.1 Containable Impervious Areas**

1. 33 Tank Sump Area (Granulation #1)
2. Granulation #2 Plant Area

Spills and leaks of phosphoric acid and sulfuric acid onto impervious areas designated by yellow lines in Figure 2 (“Containable Impervious Areas”) will be separately contained, and then recovered and/or sent to the Elementary Neutralization Unit (ENU) for use in the wastewater reuse facility in accordance with this document. The foregoing does not relieve Simplot of its obligations for any spills and leaks under any applicable law.

**4 Ammonium Phosphate Granulation Plants Leak / Spill Detection Systems and Response Procedures****4.1 General**

The purpose of this Section is to assist Simplot’s operators with the appropriate management of leaks and spills of phosphoric acid and sulfuric acid in the Granulation Plants.

Leaks and spills of a Table 1 Material to secondary containment areas in the Granulation Plants will be captured and returned to the process as soon as practicable. If recovery is not possible, then the leak and/or spill will be treated in the ENU before being discharged to the wastewater reuse facility. If treatment is not possible with the ENU, then the leak and/or spill will be managed in compliance with the RCRA Requirements in the Consent Decree, as well as the specific procedures set forth in this BMP.

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#### 4.2 Release Reporting

Simplot personnel are responsible for notifying the appropriate personnel immediately upon the identification of a leak or spill of a Table 1 Material with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) pursuant to this BMP. This BMP does not relieve Simplot of its obligation to comply with any federal, state, or local laws applicable to hazardous materials releases to the environment.

#### 4.3 Inspections

Operators will inspect the Granulation Plants in the course of their normal rounds and document the inspections. The operator will correct leaks from valves, flanges, pumps, or any other equipment that can be readily and safely corrected at the time of discovery. The incident will be recorded in the tracking database software. Operator and supervisor responsibilities associated with discovery of a spill or leak are outlined in this BMP.

#### 4.4 Recording / Tracking

When plant personnel identify a leak or spill of a Table 1 Material with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1), appropriate actions will be taken as outlined in this BMP. A record of the incident will be entered into the tracking database software within 24 hours of the incident. Supervisors will be trained to enter incidents into the tracking database software. As described in Section 2.5, the tracking database software program tracks specific information including date and time of release, date and time of report, a description of the incident, volume of the material, type of material, and additional supporting information.

#### 4.5 Reporting, Recovery, and Corrective Actions

##### 4.5.1 Containable Impervious Areas of the Granulation Plants

###### 4.5.1.1 Reporting

A leak or spill of a Table 1 Material with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) to Containable Impervious Areas as described in the Facility Report must be logged into the tracking database software, but does not need to be reported to EPA or other regulatory agency if recovered to a tank containing the same chemical, the Acid Value Recovery System, or the Granulation Recovery System(s), as described below.

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**4.5.1.2 Recovery and Corrective Action**

A leak or spill of a Table 1 Material with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) to Containable Impervious Areas as described in the Facility Report will be recovered back to the appropriate process vessel containing the same chemical or input into the Acid Value Recovery System or Granulation Recovery System(s), as described in the Facility Report.

If recovery is not possible, then the leak and/or spill will be treated in the ENU and discharged to the wastewater reuse facility. If treatment is not possible, the leak or spill must be managed in compliance with the RCRA Requirements of the Consent Decree. This BMP does not relieve Simplot of its obligation to comply with any federal, state, or local laws applicable to hazardous materials releases to the environment.

**4.5.2 Other Areas****4.5.2.1 Reporting**

Simplot personnel are responsible for notifying the appropriate personnel immediately upon identification of a leak or spill of a Table 1 Material with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1).

A leak or spill of a Table 1 Material with a reasonable potential to reach or exceed the BMP Actionable Volume (Table 1) that is not contained within a Containable Impervious Area as described in the Facility Report must be recorded in the tracking database software and reported pursuant to the Consent Decree. This BMP does not relieve Simplot of its obligation to comply with any federal, state, or local laws applicable to hazardous materials releases to the environment. The tracking database software shall be used to record such a spill or leak and to track immediate actions taken to address the leak or spill.

**4.5.2.2 Corrective Actions**

The cleanup of a leak or spill of a Table 1 Material shall be administered in compliance with the Consent Decree. This BMP does not relieve Simplot of its obligation to comply with any federal, state, or local laws applicable to hazardous materials releases to the environment.

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**4.6 Production Department Responsibilities**

The Granulation Production Department personnel shall be responsible for troubleshooting and correcting process upsets. The employee who discovers the upset shall execute his or her responsibilities as outlined in this BMP. The operator covering the plant at which the leak or spill occurred shall notify his or her supervisor and begin taking immediate action. The appropriate manager or supervisor shall enter the incident in the tracking database software.

**4.7 Maintenance Department Responsibilities**

The Maintenance Department personnel will be responsible for repairs and maintenance to faulty equipment. If the leak or spill is the result of a mechanical failure, then the appropriate operations personnel shall notify the Maintenance Department of the condition and shall initiate a work order request for correction of the problem. The Maintenance Department shall be responsible for timely completion of leak repairs. Maintenance work requests and their status are tracked in a computerized maintenance management system. When the Maintenance Department completes the repairs, the appropriate operations personnel shall be notified.

**5 Recovery System Operation for Spill and Leak Recovery****5.1 Phosphoric Acid Plant and AFIP Areas**

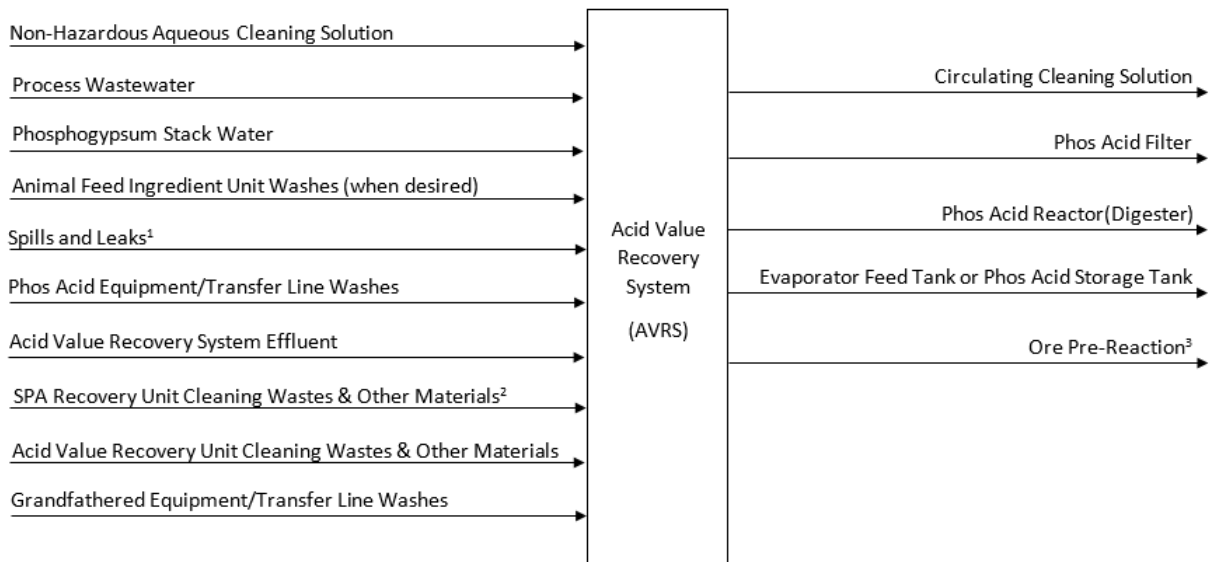
Simplot may recover spills and leaks of phosphoric acid, sulfuric acid, nitric acid, or Acid Value Recovery System Effluent; or NHACS, Process Wastewater, Phosphogypsum Stack System Wastewater, when mixed with any of the preceding solutions due to spills, leaks, or cleaning of leaks and spills, in Semi-Segregable, Containable Impervious, and/or Predominately Containable Impervious areas to a tank containing the same chemical or to the Acid Value Recovery System. The Acid Value Recovery System will return the spills, leaks, and cleaning solution streams to the phosphoric acid production process, where constituent values can be recovered through the methods outlined in Section VI of the Facility Report and illustrated in Diagram 1 below.

Process Wastewater, Phosphogypsum Stack System Wastewater, or NHACS may be used for washing the floors, building, equipment, etc. in the AFIP and/or Phosphoric Acid Plants' Semi-Segregable, Containable Impervious, and Predominately Containable Impervious areas as described in the Facility Report, Section VII: Containment of Phosphoric Acid Production Related Spills and Leaks. These plant wash downs of Semi-Segregable and Predominately

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Containable Impervious Areas are not considered a spill or leak and may be returned to the Phosphogypsum Stack System or the Phosphoric Acid Plant for reuse. Plant wash downs of Containable Impervious Areas (such as within SPA) will be recovered to the Acid Value Recovery System. Plant wash downs may include the wash down of intermittent operational inputs as described in Section 5: Minimization of Operational Phosphoric Acid Inputs, of this BMP and leaks and spills that do not have the potential to reach or exceed the BMP Actionable Volume (Table 1 of this BMP).

Diagram 1: Acid Value Recovery Tank Inputs and Effluents



<sup>1</sup>Spills and leaks include: P<sub>2</sub>O<sub>5</sub>, H<sub>2</sub>SO<sub>4</sub>, Nitric Acid, and mixtures of the proceeding with Process Wastewater, Phosphogypsum Stack Water, and NHACS

<sup>2</sup>Does not include SPA Process Condensates or non-hazardous materials (such as SPA APCD blowdown)

<sup>3</sup>Potential Future Project described in Section VIII of the Facility Report

## 5.2 Ammonium Phosphate Granulation Areas

The granulation containment pads shall be designed to collect rainfall, spills, leaks, and cleaning solutions within plant areas. The collection sumps for these containment pads shall pump to the granulation plant scrubbers, Granulation Recovery Tank(s), or the wastewater reuse facility. The granulation plant acid scrubbers and recovery tank are designed to recover fertilizer materials, product and raw materials for consumption in the granulation process.

## 6 Minimization of Operational Phosphoric Acid Inputs

### 6.1 Background

During normal operation of the Phosphoric Acid Plant, various activities may result in the operational input of phosphoric acid to impervious areas within the confines of the Phosphoric Acid Plant or, indirectly, to the Phosphogypsum Stack System via Semi-Segregable areas/sumps. These activities include sample collection, slide/knife gate valve operation, dynamically sealed pump manipulations, clearing plugged piping or process equipment (not to include unplugging via standard cleaning operations), and similar routine operations (other than standard cleaning operations). These routine activities resulting in minor operational inputs shall not be considered unintended inputs, accidental, or unplanned leaks or spills. Intermittent operational inputs of phosphoric acid to impervious areas or the Phosphogypsum Stack System are unavoidable and shall not be considered malfunctions, leaks, or spills, unless the volume from one of these inputs to the Phosphogypsum Stack System exceeds the BMP Actionable Volume (Table 1). Notwithstanding, operators shall minimize the volume of such phosphoric acid inputs whenever possible and recover acid loss where practicable. Section 6.2 Operational Input Minimization describes some of the common minimization and recovery tactics for these intermittent operational inputs.

### 6.2 Operational Input Minimization

#### 6.2.1 Sample Collection

Samples of phosphoric acid or reactor slurry collected for purposes of plant process control shall be returned to the process. During sample collection, operational inputs shall be minimized to the extent practicable, releasing only the amount of material necessary out of the primary containment in order to accomplish the task and recovery where practicable.

#### 6.2.2 Clarifier / Valve / Pump / Line Operational Releases

Operational inputs of phosphoric acid from clarifier unplugging, valve operation and line unplugging shall be minimized to the extent practicable, releasing only the amount of acid necessary out of the primary containment area in order to accomplish the task and recovery where practicable.



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### 6.3 Response

#### 6.3.1 Releases Outside Containment Areas (“Other Areas”)

All reasonable measures will be taken to avoid releases of phosphoric acid outside of plant containment (impervious) areas. This BMP does not relieve Simplot of its obligation to comply with any federal, state, or local laws applicable to hazardous materials releases to the environment.

#### 6.3.2 Emergency Response

Simplot’s Spill Reporting Policy and Procedure contains guidance for the management of environmental spills or releases that may require emergency response measures.

## **7 Containment Integrity Plan**

### 7.1 Background

The mechanical integrity of new, upgraded, or existing containment systems for phosphoric acid shall be managed in accordance with Appendix 5.B (Inspections and Integrity of Tanks, Sumps, and Secondary Containment). The most current versions of these specifications shall be maintained by the Inspections and Environmental Departments.

### 7.2 Tanks

The mechanical integrity of phosphoric acid tanks shall be managed in accordance with the current version of Appendix 5.B (Inspections and Integrity of Tanks, Sumps, and Secondary Containment).

### 7.3 Concrete Acid Pads

The mechanical integrity of concrete acid pad containment systems for phosphoric acid leaks or spills shall be inspected and evaluated annually in accordance with requirements contained in Appendix 5.B (Inspections and Integrity of Tanks, Sumps, and Secondary Containment).

Simplot shall be responsible for conducting annual inspections of concrete acid pads in the Phosphoric Acid, AFIP, and Granulation Plant areas. Visual inspection will be for the following indicators: erosion/holes, protective liner damage and/or floor drainage irregularities. Inspection results shall be documented in a report with

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recommendations, reviewed with appropriate management, and implemented as needed.

When Simplot determines it is necessary to replace or partially replace concrete acid pads in the Phosphoric Acid, AFIP, and Granulation Plant areas, under-slab liners shall be installed in the affected area.

#### 7.4 Sumps and Ditches

The mechanical integrity of sumps and ditches used in washing circuits and collection of phosphoric acid leaks or spills shall be managed as specified in Appendix 5.B (Inspections and Integrity of Tanks, Sumps, and Secondary Containment).

Simplot shall be responsible for conducting inspections of sumps and ditches whenever major plant outages, turnarounds, or other events in the phosphoric acid and granulation plant areas allow for the sumps to be drained (not to exceed once every 5 years). Inspection results shall be documented in a report with recommendations and reviewed with appropriate management and implemented as needed.

## 8 **BMP Performance Standards**

### 8.1 Performance Criteria

The goals of the BMP are listed in the Introduction of this Appendix. Simplot will develop appropriate performance criteria consistent with the BMP herein for the purpose of evaluating trends and improving performance. The performance criteria include progress review of the construction and utilization of the projects in Appendix 6 (Project Narrative & Compliance Schedules) to the Consent Decree, BMP training, and implementation of the procedures set forth herein.

Beginning within eighteen months from the Effective Date of the CD, annual meetings will be held with EPA to review BMP performance. Meeting frequency may be adjusted based on the completion of the implementation schedule.

### 8.2 Performance Criteria for Spill and Leak Detection

An initial data collection period of 12 months will be used to establish baseline performance criteria for spills, leaks, and other releases. Once BMP performance criteria and a baseline are established, Simplot will review the criteria quarterly. Based upon the reviews, BMPs will be updated as warranted to minimize leaks, spills, and other releases. Simplot will initiate additional review of the BMP Program under the following circumstances:

**BMP-Minimizing and Addressing Spills and Leaks  
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- At any time during a calendar quarter when two or more leak or spill events of phosphoric acid, nitric acid, or sulfuric acid into “Semi-Segregable Areas” have occurred where the unrecovered volume exceeded the quantity shown in Table 1: BMP Actionable Volumes (Table 1) in a rolling 24-hour period
- At any time during a calendar quarter when two or more leak or spill events of phosphoric acid, nitric acid, or sulfuric acid into “Predominately Containable Impervious Areas” have occurred where the unrecovered volume exceeded the quantity shown in Table 1: BMP Actionable Volumes (Table 1) in a rolling 24-hour period
- At any time during a calendar quarter when two or more leak or spill events of phosphoric acid, nitric acid, or sulfuric acid have occurred in “Other Areas” that exceed the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Reportable Quantity

### 8.3 Reporting

Reporting shall be conducted pursuant to the Consent Decree and the aforementioned Performance Criteria.

## 9 **BMP Training**

### 9.1 Overview Training

An overview of BMP issues and procedures will be included in the periodic environmental compliance training provided to all affected employees, such as the managers, superintendents, supervisors, operators, and maintenance personnel in the phosphoric acid, SPA, PPA, AFIP, and granulation plants.

### 9.2 Area Specific Employee Training

Employees within phosphoric acid, SPA, PPA, AFIP, and granulation plants will receive initial training on RCRA and the Consent Decree, including the BMP, through classes and materials developed by Simplot. Employee training is part of project implementation and is found in Appendix 6 (Project Narrative & Compliance Schedules) to the Consent Decree. Detailed refresher training on the Consent Decree, including RCRA and the BMP, will be conducted for all affected employees every year. Updated training will be provided as BMP projects are completed and will commence within two months of establishing a baseline under Section 7.2, and if the BMP is modified. Records of training will be maintained by the Training Department.

### 9.3 Contractors

The relevant portions of this BMP will be incorporated into contractors’ site-specific training where appropriate.

**BMP-Minimizing and Addressing Spills and Leaks  
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## Attachment A: Tables

Table 1. BMP Actionable Volumes

Chemical	Concentration	Non-Segregable, Semi-Segregable, Predominately Containable Impervious, & Containable Impervious (gallons)
Phosphoric Acid	Equal to or less than 28% <sup>1</sup>	1,100
	Greater than 28% and equal to or less than 58%	500
	Greater than 58% and equal to or less than 69%	320
Sulfuric Acid	93%, 98%	70
Nitric Acid	54-57%	170

<sup>1</sup> Excluding Process Wastewater and Phosphogypsum Stack Wastewater.

Table 2: RCRA 8 Metals and Regulatory Limits

TCLP Metals	Toxicity Characteristic (TCLP, grab) (mg/L)	UTS for Wastewater (mg/L)	UTS for Non-Wastewater (mg/L)
Arsenic	5.0	1.4	5.0
Barium	100	1.2	21
Cadmium	1.0	0.69	0.11
Chromium (total)	5.0	2.77	0.60
Lead	5.0	0.69	0.75
Mercury	0.2	0.15	0.025
Selenium	1.0	n/a	n/a
Silver	5.0	0.43	0.14

Note 1: UTS = Universal Treatment Standards (40 C.F.R. §268.48).  
Note 2: The amount of total suspended solids (TSS) by weight in the sample must be determined in order to compare the UHC concentrations to the appropriate UTS. The waste stream is a "wastewater" if it contains less than 1% by weight TSS, and "non-wastewaters" contain TSS ≥1% by weight (defined in 40 C.F.R. §268.2(d) and (f)).  
Reference: 40 C.F.R. §§261.24 & 268.48

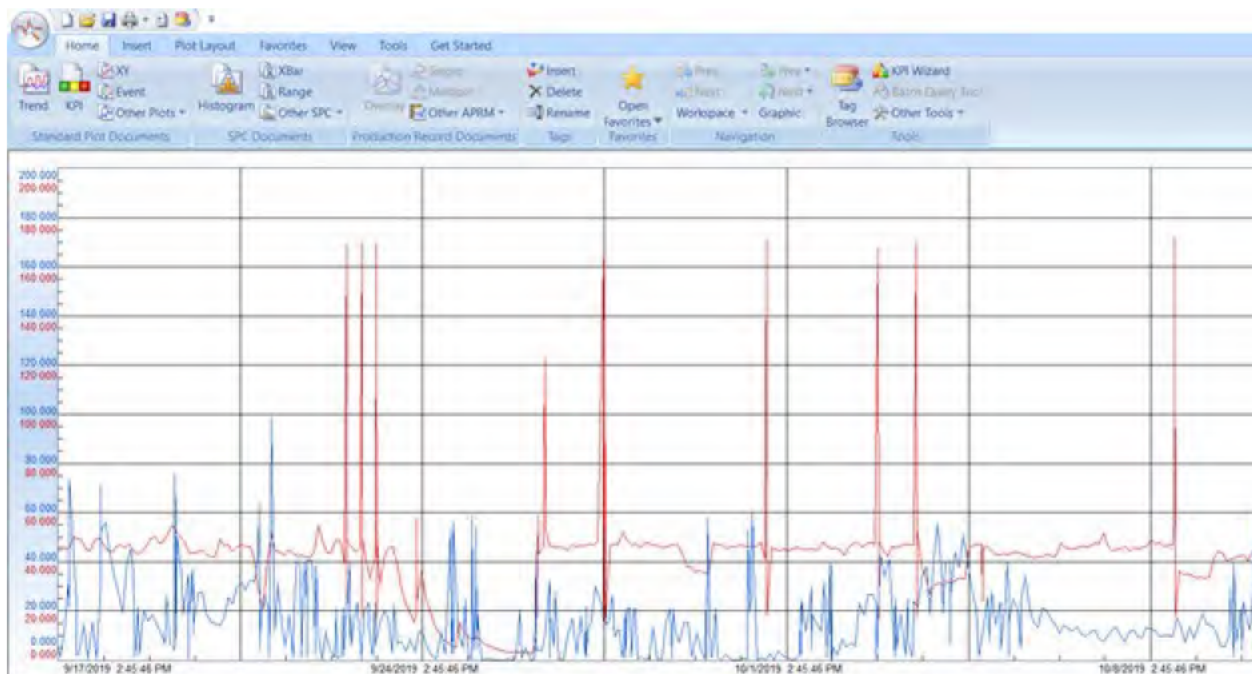
**BMP-Minimizing and Addressing Spills and Leaks  
Simplot Don Plant****Attachment B: Acid Content Measurement on Process Wastewater System**

This attachment addresses acid content measurement located in the outgoing semi-segregable sump streams at the Phosphoric Acid and AFIP Plants. It contains information on instrument locations, alarm settings, and maintenance.

General

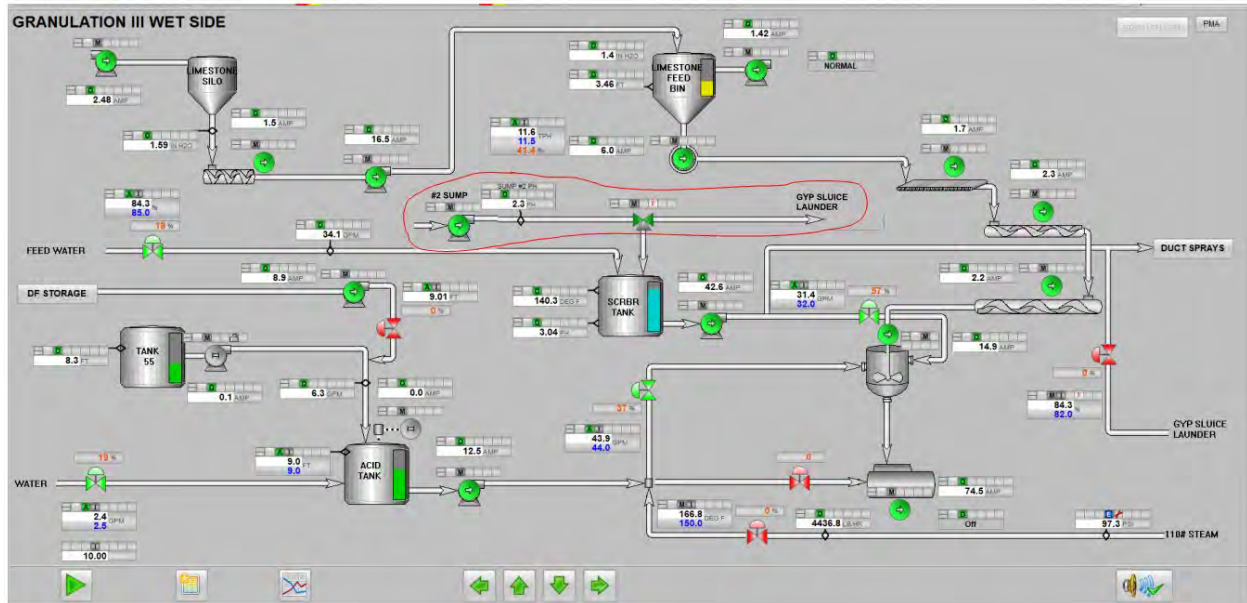
Acid content instruments continuously measure the acid content of the outgoing semi-segregable sump streams and will calculate the differential from a reference incoming Process Wastewater. The incoming Process Wastewater acid content value may be periodically measured to validate and/or update the reference number utilized in the calculation. The acid content measurement of the semi-segregable sump streams are displayed on the operators' distributive control system, see Figure 4 and Figure 5 below as an example.

Figure 4: Example of Acid Content Measurement Trend Stored in Data Historian



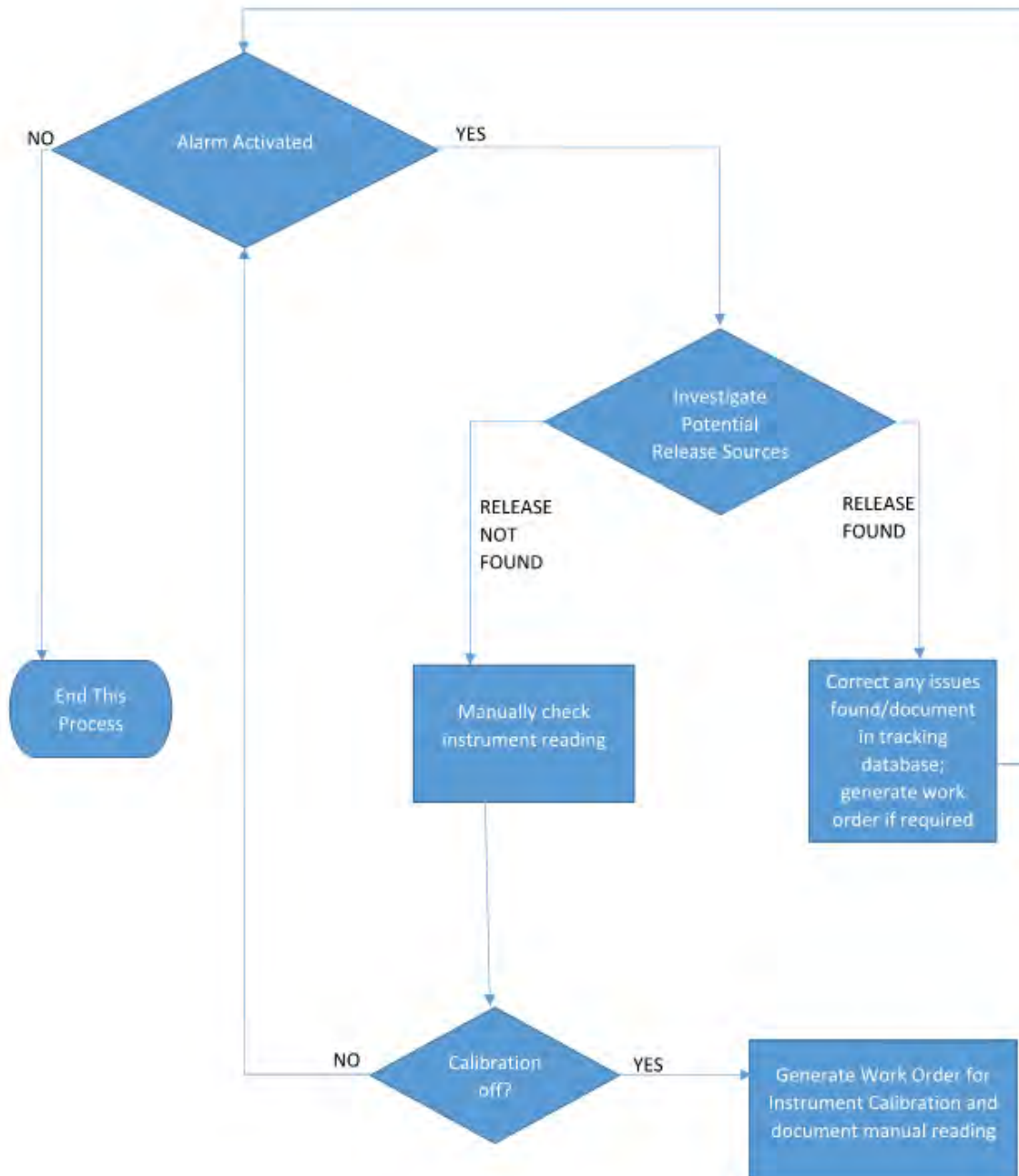
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**Figure 5: Example of Operator Monitoring Graphic **\*\*Confidential Business Information\*\*****



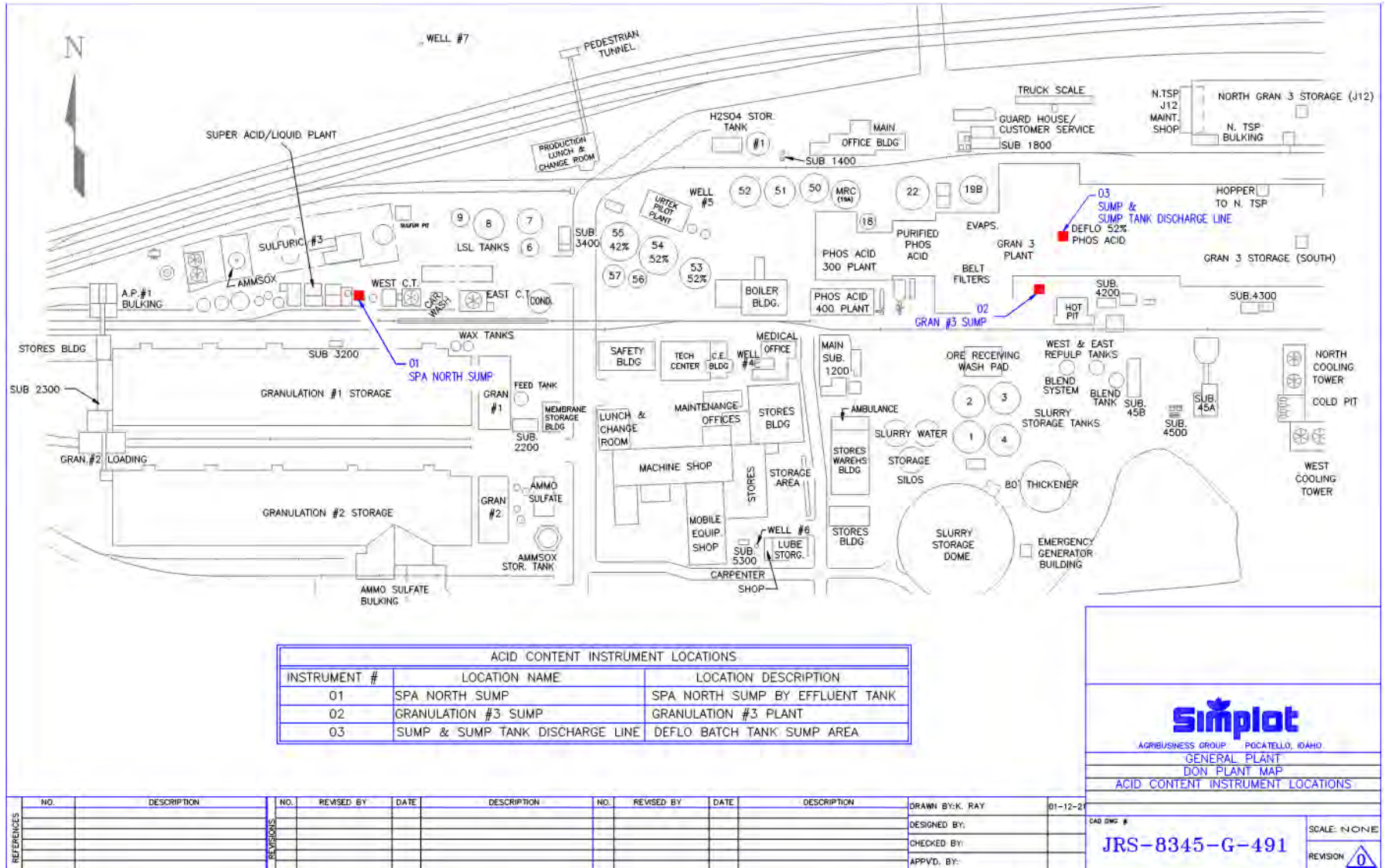
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**Figure 6: Acid Content Measurement Alarm Trigger Corrective Action Plan**



**Acid Content Measurement Alarm Trigger Corrective Action Plan  
Simplot Don Plant  
Rev 1**

Figure 7: Don Plant Acid Content Instrument Locations





**Table 3: Don Plant Acid Content Measurement Initial Alarm Limits (Differential)**

Instrument Number	Probe Location	Alarm Trigger (SG) [mS]
01	SPA North Sump	(0.15)
02	Granulation #3 Sump	[30]
03	Sump Tank	[30]

**Maintenance**

Simplot uses manufacturer recommended calibration procedures specific to the type of instrument. The Don Plant Facility currently utilizes Berthold model 474 density meters. The calibration method utilizes either single or multiple calibration points by inputting lab determined densities to develop a density curve specific to each application. If Simplot were to switch to a different density monitoring instrument, manufacturer recommended calibration procedures would be utilized for that instrument.

The Don Plant Facility currently utilizes M4Knick SE630 Memosens® conductivity probes. The calibration methods utilize an air zero to provide a 1-point calibration. If Simplot were to switch to a different acid content monitoring instrument, manufacturer recommended calibration procedures would be utilized for that instrument.

## Appendix 5.B

# Inspections and Integrity of Tanks, Sumps, and Secondary Containment

Don Plant

Final

May 12, 2021

**BMP-Inspections and Integrity of  
Tanks, Sumps, and Secondary Containment  
Simplot Don Plant**

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**BMP-Inspections and Integrity of  
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## **1 Introduction**

Simplot operates a phosphate fertilizer manufacturing facility located at 1150 Highway 30, Pocatello, Idaho ("Facility"). The Facility operates and maintains process sumps ("Process Sumps") with associated pads and separate leak detection systems throughout the complex. The purpose of these Process Sumps and pads is to efficiently utilize process materials and to minimize potential environmental liabilities. See Attachment A for a list of all sumps and pads in the Facility. See Attachment E for a map showing each of their locations within the Facility.

This program (or "Program") provides instructions for: managing the accumulation of process liquids ("Process Liquids") in Process Sumps and pads; inspecting Process Sumps and pads; and pumping Process Sumps and pads. This Program also provides instructions for inspection of storage tanks, as defined below. There are two separate inspections conducted and documented for all Process Sumps. One inspection is conducted by area operations personnel and/or a designee, and the second inspection is completed by the maintenance department after a vacuum truck operator has removed all liquids from and otherwise cleaned the process sump. Sump and pad inspection forms utilized during the two separate inspections are found in Attachment C. Any issue with the sump will be documented during the inspection, and the sump will be inspected weekly until such time the issue, related to the integrity or functionality of the sump, is resolved. If cleaning and inspecting a Process Sump is not possible for some reason, the production area manager must document the reason on the sump report form.

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## **2 Operating Procedure**

Process Sumps and pads will be managed in a manner to ensure that Process Liquids stay within the sump, pad, and associated containment areas at all times. The Facility Process Sumps are designed and used to handle Process Liquids and to minimize the potential for these materials to be released into the environment. Efforts should be made to keep the Process Sumps and pads as dry as possible and minimize the liquid level in the Process Sumps.

### **2.1 Process Sumps and Pads Inspections**

There will be two separate inspections conducted and recorded for all Process Sumps and pads. The first inspection will be scheduled monthly and conducted by area operations personnel and/or a designee. The sump checklist form will be utilized for the inspection (Attachment C). The second inspection will be completed by the maintenance department after a vacuum truck operator has removed all liquids from and otherwise cleaned the Process Sump. This second inspection will be conducted whenever major plant outages, turnarounds, or other events in the Phosphoric Acid, Animal Feed Ingredient, and Granulation Plant areas allow for the sumps to be drained or when the operations group or sump and pad team inspection notes a more thorough inspection is needed to identify issues with a sump. These sump inspections shall occur at least once every 5 years.

#### **2.1.1 Area Operations Sump and Pad Inspections**

Area operations sump and pad inspections are designed to identify cracks, defects, debris, chips, leaks, holes, severe corrosion/erosion, and pluggage in the following areas:

- Pad(s)
- Process Launderers Leading to Sump
- Process Lines Leading to and from Sump
- Sump Pump and Motor
- Float Switch/Level Indicator
- Tanks and Pumps on Pad Area Leading to Sump
- Leak Detection on Double-Walled Sumps

#### **2.1.2 Secondary Containment and Leak Detection Systems**

If a sump or pad is designed with secondary containment, the leak detection port(s) will be opened during the monthly inspection and checked. See

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Attachment B for a list of all sumps and pads with secondary containment and leak detection ports.

If liquid is noted in the leak detection port, the following procedure will be followed:

1. Measure the liquid level.
2. If possible, obtain a sample and submit to the analytical lab for analysis. All sample results will be collected by the operations personnel or designee and documented on the corresponding sump inspection form.
3. Pump out the liquid and record the estimated volume.
4. If a defect is found in the pad or secondary containment system during the course of the inspection, issue a work order immediately for pad and/or sump repair. Record the work order number on the inspection report. Work will be scheduled by the production area manager to correct the problem, and the repairs will be completed as soon as possible.
5. Once the work has been completed the production area manager must contact the environmental department so that they may follow-up on the report with the repairs that were done.
6. If more than five gallons of low pH (<2) liquid is found in a secondary containment system on a repetitive basis, and the source cannot be identified (i.e. no obvious leaks or cracks are observed during the monthly inspection), the sump and pad team<sup>1</sup> will assemble the necessary resources to identify and correct the problem.
7. Until the issue is resolved, a more frequent (at least weekly) inspection of the secondary containment system will be conducted. The results of these additional inspections (activities, date, volume of liquid removed, etc.) will be documented and attached to the monthly sump inspection form.

## 2.2 Tank Inspections

This section outlines the general tank inspection procedures for tanks that meet the criteria outlined in the applicability criteria (“Applicability Criteria”) below. The tanks that fall under the criteria are listed in Table 1 Applicable Tank List.

### Applicability Criteria

1. Outside phosphoric acid tanks with 20% or greater concentration
2. Outside tanks that are part of the Acid Value Recovery System

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<sup>1</sup> The sump and pad team should include at least one representative from each production area, environmental, maintenance, and engineering.

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### 3. Outside tanks that are part of the SPA Recovery System

These tanks are typically inspected during scheduled cleaning events and periodically using the following criteria as a guide.

The general inspection schedule for tanks are as follows:

- Internal tank inspections are performed utilizing API 653 recommended procedures and inspection frequencies (5-10 years) as a guideline but are typically inspected more frequently during scheduled tank cleanings (1-3 years).
- External tank inspections are performed utilizing API 653 recommended procedures and inspection frequencies (5 years) as a guideline but are typically inspected more frequently during scheduled tank cleanings (1-3 years).
- Internal and external NDE/NDT inspections are conducted at recommended intervals (5-10 years) utilizing API 653 as a reference.
- External visual inspections are conducted annually utilizing API 653 as a reference.

Many of the storage tanks covered by this Program are rubber lined or coated preventing dye penetrant and ultrasonic thickness testing of the floor as described in API 653. Internal inspections of the tank do include a visual inspection, durometer testing of rubber, and/or spark testing of the rubber as the cleanliness of the rubber or coating allows. Removing minor amounts of hard scale for rubber lining or coating systems to allow for NDE/NDT internal inspections, has the potential to cause more damage to the lining or coating than the NDE/NDT may prevent, making a visual internal inspection the more prudent choice in these situations.

Table 1: Applicable Tanks List

Tank/Equipment Name	Tank No.	Type of Service Phos Acid (%)	Area
MRC Clarifier	TA040	28	Phosphoric Acid
19B Clarifier	TA042	28/42	Phosphoric Acid
Tank 50	TA044	28	Phosphoric Acid
Tank 51	TA041	28	Phosphoric Acid

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22 Clarifier	TA043	42	Phosphoric Acid
54 Clarifier	TA048	52	Phosphoric Acid
Tank 55	TA043	42	Phosphoric Acid
Tank 56	TA136	28/42/52/SPA Muds	Phosphoric Acid
Tank 57	TA200	42/52/SPA Muds	Phosphoric Acid
SPA Evaporator Feed Tank	TA141	52/SPA Muds	SPA Plant
Oxidation Reactor	TA244	69	SPA Plant
#1 Aging Tank	TA189	69	SPA Plant
#2 Aging Tank	TA175	69	SPA Plant
Filter Feed Tank	TA143	69	SPA Plant
SPA Filter Product Tank	TA144	69	SPA Plant
Tank 8	TA217	69	Shipping/Receiving
Tank 9	TA218	69	Shipping/Receiving
SPA Deflo Dilution Tank	TA159	62/55	SPA Plant
#6 Tank	TA191	55	Shipping/Receiving
Tank 52	TA047	52	Phosphoric Acid
Tank 53	TA046	52	Phosphoric Acid
Tank 2	TA157	55	SPA Plant
SPA Feed Tank	TA347	69	APP Plant
Receiving Tank 7	TA192	54/69	Shipping/Receiving
Tank 33	TA135	28/42/52/SPA Muds	Granulation



### **3 Inspection Documentation**

All tank inspection records are kept in the maintenance inspection department. In general, the inspection reports and supporting documentation are filed in the corresponding tank records and the two most recent inspection reports are retained for reference and verification purposes.

Results from the sump and pad inspections must be recorded on the appropriate inspection form. The area operations sump and secondary containment inspections are recorded by the area operations personnel and/or designee that is performing the inspections on the *Operations Process Sump and Secondary Containment Inspection Form* (see Attachment C).

The area operations personnel and/or designee must completely and accurately fill out the applicable inspection form(s). They must also submit any liquid samples to the analytical lab for analysis and record any lab analysis results on the applicable sump inspection form. After the inspection is complete, the forms must be submitted to the production area manager for approval. The production area manager must follow up on any work order.

The production area manager will keep one copy of the inspection report for his/her file and forward the remaining copies to the environmental department to have a copy for their record keeping purposes.

If a concern noted during the inspection relates to the integrity or functionality of a Process Sump system, immediate notification must be made to the production area manager. The discrepancy must be documented on the inspection form and a list of corrective actions must be included in the "Comments" section of the form.

When a work order is written to correct the discrepancy, the work order number and the date the work order was issued must be documented in the "Comments" section of the inspection form.

### **4 Environmental Management**

The plant manager and/or environmental manager must be available to assist operations and maintenance personnel in the management of this program. The environmental department will review the inspection forms and will generate an electronic summary of the inspections. The summary will be distributed monthly to the operations, maintenance, and engineering departments. The Don Plant sump and pad team will review this summary.

**BMP-Inspections and Integrity of  
Tanks, Sumps, and Secondary Containment  
Simplot Don Plant**

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#### 4.1 Monthly Summary

The summary will be used to ensure that all pad and sump integrity concerns are addressed, and funds allocated to maintain sumps and pads. The plant management team will coordinate with the production area managers as well as maintenance and engineering to ensure that sump and pad projects are completed. The environmental department will provide characterization and disposal support to maintenance and engineering when planning sump or pad projects. A work order, management of change, and/or capital improvement project will be completed by appropriate personnel to address issues found during inspections.

The environmental department will retain all sump and pad reports for 2 years.

#### 4.2 Program Review

The sump and pad team will ensure an annual review of this Program is conducted and verify that the written plan reflects the current management system.

The environmental department will keep a plant map identifying the location of all process Sumps and pads (see Attachment E). The environmental department will also maintain a file that identifies potential inputs into area process sumps and pads and the associated location where these input materials are reclaimed in the process (see Attachment D).

Production area managers and the engineering department will be responsible for ensuring that the environmental department is aware of any changes in area processes, sumps or pads that may change the input or location of recovery in the process.

### 5 Training

Level I training will be implemented for all Don Plant employees as a web-based awareness training and the web-based training system will maintain all associated training records.

Level II specialized training on the process sump and pad management program will be given to all personnel who will be involved in the inspection program.

Specialized training will be given to storage tank inspectors within the inspections department. This training will involve training on visual and other relevant inspection techniques and known damage mechanisms for the tanks being inspected.

**BMP-Inspections and Integrity of  
Tanks, Sumps, and Secondary Containment  
Simplot Don Plant**

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The environmental manager will be responsible for ensuring that the plant management team and environmental department personnel have reviewed and understand their responsibilities related to this Program.

## **6 Definitions**

**Process Liquid:** A liquid consisting of Process Wastewater, phosphoric acid, Acid Value Recovery System Effluent, non-hazardous aqueous solutions, and/or spills/leaks of phosphoric acid, sulfuric acid, and/or nitric acid.

**Process Sump:** Any pit, reservoir, trough, trench, containment structure, or drainage control system that serves to collect Process Liquids for utilization in the process.

# Storage Tank External Inspection Checklist

Tank Name: \_\_\_\_\_ Equipment #: \_\_\_\_\_ Date: \_\_\_\_\_

Diameter: \_\_\_\_\_ Height: \_\_\_\_\_ Specific Gravity: \_\_\_\_\_

Floor Nominal: \_\_\_\_\_ Bottom Course Nominal: \_\_\_\_\_

T-min Floor: \_\_\_\_\_ T-min Bottom Course \_\_\_\_\_

Material of Const. Floor and Shell: \_\_\_\_\_ Type of Rubber Liner: \_\_\_\_\_

Inspector: \_\_\_\_\_  
Name License # Signature Date

Approved: \_\_\_\_\_  
Name Title Signature Date

## **Background:**

### **External Checklist:**

<b>Inspection Item</b>	<b>Status</b>	<b>Comments</b>
Is tank exterior free of leaks, corrosion or cracks?		
Is tank shell free of noticeable denting, distortions, buckling or bulging?		
Is exterior coating or paint in good working condition		
Is aboveground piping (valves, fittings, connections, pumps, etc.) free of visible leaks?		
Are ladders/platforms/walkways secure with no sign of damage?		
Concrete pad or ring wall free of cracking or spalling?		
Tank supports in satisfactory condition		
Are leak detection ports open and clean?		
Water able to drain away from tank?		
Grounding strap between tank and Foundation in good condition?		
Is containment structure in satisfactory condition?		
<b>Insulation</b>		
<b>Inspection Item</b>	<b>Status</b>	<b>Comments</b>
Free of missing insulation?		
Insulation free of noticeable areas of moisture?		

Insulation free of visible signs of damage?		
Insulation adequately protected from water intrusion?		

**Conclusion/Recommendations:**

<b>Repair Items</b>		
<b>Item</b>	<b>Description</b>	<b>Repair Number</b>
1		



*Figure 1-Repairs*

*Figure 2- Completed Repairs*

# Storage Tank Internal Inspection Checklist

Tank Name: \_\_\_\_\_ Equipment #: \_\_\_\_\_ Date: \_\_\_\_\_  
 Diameter: \_\_\_\_\_ Height: \_\_\_\_\_ Specific Gravity: \_\_\_\_\_  
 Floor Nominal: \_\_\_\_\_ Bottom Course Nominal: \_\_\_\_\_  
 T-min Floor: \_\_\_\_\_ T-min Bottom Course \_\_\_\_\_  
 Material of Const. Floor and Shell: \_\_\_\_\_ Type of Rubber Liner: \_\_\_\_\_

Inspector: \_\_\_\_\_  
 Name License # Signature Date

Approved: \_\_\_\_\_  
 Name Title Signature Date

## Background:

### External Checklist:

Inspection Item	Status	Comments
Is tank exterior free of leaks, corrosion or cracks?		
Is tank shell free of noticeable denting, distortions, buckling or bulging?		
Is exterior coating or paint in good working condition		
Is aboveground piping (valves, fittings, connections, pumps, etc.) free of visible leaks?		
Are ladders/platforms/walkways secure with no sign of damage?		
Concrete pad or ring wall free of cracking or spalling?		
Tank supports in satisfactory condition		
Are leak detection ports open and clean?		
Water able to drain away from tank?		
Grounding strap between tank and Foundation in good condition?		
Is containment structure in satisfactory condition?		
Insulation		
Inspection Item	Status	Comments
Free of missing insulation?		
Insulation free of noticeable areas of moisture?		

Insulation free of visible signs of damage?		
Insulation adequately protected from water intrusion?		

**Internal Checklist:**

Inspection Item	Status	Comments
Inspect the shell to floor weld		
Inspect the floor Lapp Welds		
Locate Voids under the floor		
Inspect all reinforcing pads under pipe supports		
Check floor for pitting and corrosion		
Inspect shell seam welds		
Inspect nozzle and manway to shell welds		
Inspect shell for pitting and corrosion		
Inspect Baffle to shell welds		
Inspect baffle supports		
Inspect baffles for thinning and corrosion		
Inspect mixer blades and shaft		
Inspect mixer bolts		
Inspect mixer hub and key way		
Rubber Liner		
Inspection Item	Status	Comments
Visually inspect coating adhesion		
Visually inspect for tears or delamination		
Durometer on Rubber Lining		

**Conclusion/Recommendations:**

Repair Items		
Item	Description	Repair Number
1		





*Figure 1-Repairs*

*Figure 2- Completed Repairs*

**Inspections and Integrity of Tanks, Sumps, and Secondary  
Containment  
Attachment A**

<b>PROCESS SUMP AND PAD LIST</b>	
<b>Area</b>	<b>Sump/Pad Name</b>
<b>Phosphoric Acid</b>	#1 Sump
	#2 Sump
	#3 Sump
	#4 Sump
	#5 Sump
	#8 Sump
	#9 Sump
	#10 Sump
	19B Tank Pad
	22 Tank Pad
	18 Tank Pad
	52 Tank Pad
	300 Phos Pad
<b>SPA Plant</b>	#6 Sump & Loading Dock
	#7 Sump
	SPA North Sump
	#2 Tank Pad
	Carwash Sump & Tank Pad
	Chemical Feed Building Sump
	SPA Storage Tanks Pad
	SF Unloading Pad
	SPA Reactor & Aging Pads
<b>Ore Receiving/ Water Reclaim</b>	#1 Hot Pit Sump
	Slurry Storage Sump
	Ore Thickener Sump #1
	Ore Thickener Sump #2
	Wash Pad Sump
	Blend Pad Sump
	East Overflow Pond #2 Pad
<b>Sulfuric Acid</b>	#1 Tank Sump
	Ammsox #3 Sump
	Sulfuric 300 Pad
	Sulfuric 400 Sump & Dry Tower Pad
	11-37 Truck Pad
	Sulfuric Loading Pad
	Nitric Acid Pad
	APP Reclaim Water Sump
<b>Granulation</b>	Granulation #2 Sump
	Sulfate Sump
	#33 Tank Sump
	Granulation #3 Sump
	Deflo Scrubber Sump
	Deflo Batch Tank Sump

**Inspections and Integrity of Tanks, Sumps, and Secondary Containment  
Attachment B**

<b>PROCESS SUMP AND PAD DETAILS</b>				
<b>AREA</b>	<b>SUMP/PAD NAME</b>	<b>SECONDARY CONTAINMENT</b>	<b># OF LEAK DETECTION PORTS</b>	<b>JDE NUMBER</b>
<b>Phosphoric Acid</b>	#1 Sump	Yes	1	SU001
	#2 Sump	Yes	2	SU002
	#3 Sump	Yes	1	SU003
	#4 Sump	Yes	2	SU004
	#5 Sump	Yes	2	SU005
	#8 Sump	No		SU006
	#9 Sump	Yes	2	SU007
	#10 Sump	Yes	1	SU021
	19B Tank Pad	Yes	2	SU002
	22 Tank Pad	Yes	5	SU004
	18 Tank Pad	Yes	1	SU004
	52 Tank Pad	Yes	1	SU005
300 Phos Pad	Yes	3	SU005	
<b>SPA Plant</b>	#6 Sump & Loading Dock	Yes	4	SU010
	#7 Sump	Yes	2	SU009
	SPA North Sump	Yes	2	SU026
	#2 Tank Pad	Yes	1	SU010
	Carwash Sump & Tank Pad	Yes	5	SU008
	Chemical Feed Building Sump	No		SU029
	SPA Storage Tanks Pad	Yes	3	SU009
	SF Unloading Pad	Yes	2	SU009
SPA Reactor & Aging Pads	Yes	3	SU010	
<b>Ore Receiving/ Water Reclaim</b>	#1 Hot Pit Sump	No		SU022
	Slurry Storage Sump	No		SU024
	Ore Thickener Sump #1	No		SU028
	Ore Thickener Sump #2	No		SU028
	Wash Pad Sump	Yes	1	SU015
	Blend Pad Sump	Yes	2	SU032
East Overflow Pond #2 Pad	Yes	1	PN003	
<b>Sulfuric Acid</b>	#1 Tank Sump	Yes	2	SU018
	Ammsox #3 Sump	Yes	1	SU030
	Sulfuric 300 Sump	No		SU017
	Sulfuric 400 Sump & Dry Tower Pad	Yes	2	SU016
	11-37 Truck Pad	No		SU025
	Sulfuric Loading Pad	No		SU027
	Nitric Acid Pad	No		GE012
	APP Reclaim Water Sump	Yes	2	SU034
<b>Granulation</b>	Granulation #2 Sump	Yes	1	SU013
	Sulfate Sump	Yes	2	SU020
	#33 Tank Sump	No		SU019
	Granulation #3 Sump	No		SU011
	Deflo Scrubber Sump	No		SU012
	Deflo Batch Tank Sump	Yes	1	SU012

# OPERATIONS MONTHLY PROCESS SUMP AND SECONDARY CONTAINMENT INSPECTION FORM

Sump/Pad Name:	Inspection Date:
Area:	Employee Number:
Area Manager/Supervisor:	Employee Name:

## I. Process Sump Inspection Items

Check each item after inspecting. If an item does not apply, write "N/A" in the check box. Make note of any leaks, defects, debris, holes, cracks, chips, pluggage, severe corrosion/erosion, or other problems in each observations section.

	Inspection Item	Check	Observations
1	PAD(S)		
2	PROCESS LAUNDERS LEADING TO SUMP		
3	PROCESS LINES LEADING TO AND FROM SUMP		
4	SUMP PUMP AND MOTOR		
5	FLOAT SWITCH		
6	TANKS AND PUMPS ON PAD AREA LEADING TO SUMP		
7	LEAK DETECTION ON DOUBLE-WALLED SUMPS		

Additional Observations:

## II. Secondary Containment and Leak Detection

Enter the requested information below. For those items that do not apply, write "N/A" in the space provided.

1	SECONDARY CONTAINMENT? (Y/N)		6	LIQUID PUMPED OUT? (Y/N)	
2	LEAK DETECTION PORT? (Y/N)		7	ESTIMATED VOLUME OF LIQUID: (GALLONS)	
3	LIQUID FOUND? (Y/N)		8	NEW SEAL NUMBER:	
4	MEASURED LIQUID LEVEL: (INCHES)		9	SAMPLE SUBMITTED TO ANALYTICAL LAB? (Y/N)	
5	LIQUID SAMPLE TAKEN? (Y/N)		10	SAMPLE RESULTS:	

Additional Observations:

## III. Comments

Include all corrective actions, work order numbers, work order issue dates, and other pertinent information that applies. Appropriate personnel to sign form once inspection has been completed and inspection results reviewed.

Comments:	Area Supervisor  Area Manager  Environmental Department
-----------	---

<b>Notes:</b>	1) If any discrepancy is found, immediately notify the area supervisor and note the discrepancy on this form. 2) Forms should be distributed upon completion.
<b>Distribution:</b>	White Copy: Environmental Department Yellow Copy: Area Manager Pink Copy: Area Supervisor

# MAINTENANCE PROCESS SUMP CLEANING AND INSPECTION FORM

<b>Sump Name:</b>	<b>Inspection Date:</b>
-------------------	-------------------------

<b>Area:</b>	<b>Employee Number:</b>
--------------	-------------------------

<b>Area Manager/Supervisor:</b>	<b>Employee Name:</b>
---------------------------------	-----------------------

## I. Process Sump Guzzling and Cleaning

Check the box to the right of each action item once completed. If an item does not apply, write "N/A" in the check box.  
Include additional action items as needed. Include any pertinent information on each action item in the observations section.

	Action Item	Check	Observations
1	SAFE WORK PERMIT OBTAINED FROM AREA OPERATOR	<input type="checkbox"/>	
2	SUMP PREPARED FOR GUZZLING AND CLEANING	<input type="checkbox"/>	
3	LIQUID MATERIALS PUMPED OUT OF SUMP	<input type="checkbox"/>	
4	SUMP OTHERWISE CLEANED AS NEEDED	<input type="checkbox"/>	

## II. Process Sump Inspection

Sign the box at right after inspecting the sump structure for any leaks, defects, debris, holes, cracks, chips, pluggage, severe corrosion/erosion, or other problems. Note the details of any such issues in the observations section below.

Observations:	Inspector Signature

## III. Comments

Include all corrective actions, work order numbers, work order issue dates, and other pertinent information that applies. Appropriate personnel to sign form once inspection has been completed and inspection results reviewed.

Comments:	Area Supervisor
	Area Manager
	Environmental Department

<b>Notes:</b>	1) If any discrepancy is found, immediately notify the area supervisor and note the discrepancy on this form. 2) Forms should be distributed upon completion.
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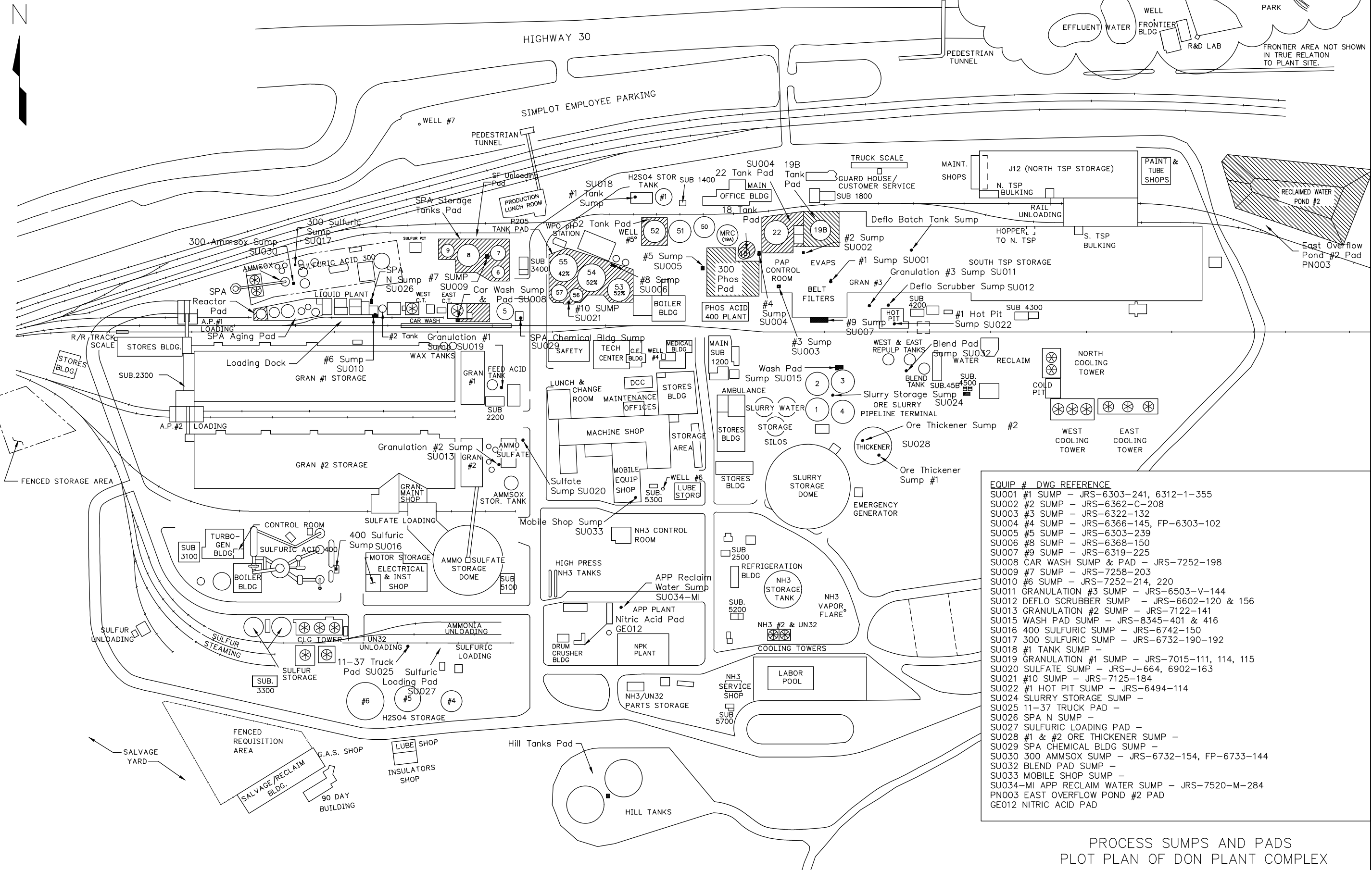
<b>Distribution:</b>	White Copy: Environmental Department Yellow Copy: Area Manager Pink Copy: Area Supervisor
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**Inspections and Integrity of Tanks, Sumps, and Secondary Containment  
Attachment D**

<b>PROCESS SUMP/PAD INPUT MATERIALS AND RECLAIM LOCATION</b>			
AREA	SUMP/PAD NAME	TYPICAL INPUT MATERIALS	MATERIALS RECLAIM LOCATION/PROCESS
<b>Phosphoric Acid</b>	#1 Sump	phosphoric acid, process water	MRC Filter Wash Tank, Tank 18, Gyp Launder
	#2 Sump	phosphoric acid, process water	MRC Filter Wash Tank, Tank 18
	#3 Sump	phosphoric acid, process water	MRC Filter Wash Tank, Tank 18, Solids Transfer Tank
	#4 Sump	phosphoric acid, process water	MRC Filter Wash Tank, 19B Filter Wash Tank, Tank 18
	#5 Sump	phosphoric acid, process water	MRC Filter Wash Tank, Tank 18
	#8 Sump	phosphoric acid, process water	MRC Filter Wash Tank, Tank 18
	#9 Sump	phosphoric acid, process water	MRC Filter Wash Tank, Tank 18
	#10 Sump	phosphoric acid, process water	Tank 56, Tank 57
	19B Tank Pad	phosphoric acid, process water	#2 Sump
	22 Tank Pad	phosphoric acid, process water	#4 Sump
	18 Tank Pad	phosphoric acid, process water	#4 Sump
	52 Tank Pad	phosphoric acid, process water	#5 Sump
300 Phos Pad	phosphoric acid, process water	#5 Sump	
<b>SPA Plant</b>	#6 Sump & Loading Dock	phosphoric acid, process water	SPA Wash Tank, SPA Re-Pulp Tank
	#7 Sump	phosphoric acid, process water	#6 Sump
	SPA North Sump	phosphoric acid, process water	FCC Tank/Gyp Launder
	#2 Tank Pad	phosphoric acid, process water	SPA North Sump, #6 Sump
	Carwash Sump & Tank Pad	phosphoric acid, process water	Carwash Tank
	Chemical Feed Building Sump	cooling tower treatment chemicals	
	SPA Storage Tanks Pad	phosphoric acid, process water	#7 Sump
	SF Unloading	phosphoric acid, process water	#7 Sump
SPA Reactor & Aging Pads	phosphoric acid, process water	#6 Sump	
<b>Ore Receiving/ Water Reclaim</b>	#1 Hot Pit Sump	Process water	
	Slurry Storage Sump	Ore	
	Ore Thickener #1 Sump	Ore	
	Ore Thickener #2 Sump	Ore	
	Wash Pad Sump	Ore, process water	Gyp Launder/Ore Slurry Dome
	Blend Pad Sump	Process water	East Gypsum Repulp Tank, West Gypsum Repulp Tank
	East Overflow Pond #2 Pad	Process water	
<b>Sulfuric Acid</b>	#1 Tank Sump	Sulfuric Acid	
	Ammsox #3 Sump	Sulfuric Acid	
	Sulfuric 300 Pad	Sulfuric Acid	
	Sulfuric 400 Sump and Dry Tower Pad	Sulfuric Acid	
	11-37 Truck Pad		
	Sulfuric Loading Pad	Sulfuric Acid	
	Nitric Acid Pad	Nitric Acid	
	APP Reclaim Water Sump		

# Process Sump and Pad Management Program

## Attachment IV

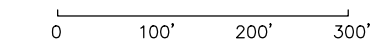


EQUIP #	DWG REFERENCE
SU001	#1 SUMP - JRS-6303-241, 6312-1-355
SU002	#2 SUMP - JRS-6362-C-208
SU003	#3 SUMP - JRS-6322-132
SU004	#4 SUMP - JRS-6366-145, FP-6303-102
SU005	#5 SUMP - JRS-6303-239
SU006	#8 SUMP - JRS-6368-150
SU007	#9 SUMP - JRS-6319-225
SU008	CAR WASH SUMP & PAD - JRS-7252-198
SU009	#7 SUMP - JRS-7258-203
SU010	#6 SUMP - JRS-7252-214, 220
SU011	GRANULATION #3 SUMP - JRS-6503-V-144
SU012	DEFLO SCRUBBER SUMP - JRS-6602-120 & 156
SU013	GRANULATION #2 SUMP - JRS-7122-141
SU015	WASH PAD SUMP - JRS-8345-401 & 416
SU016	400 SULFURIC SUMP - JRS-6742-150
SU017	300 SULFURIC SUMP - JRS-6732-190-192
SU018	#1 TANK SUMP -
SU019	GRANULATION #1 SUMP - JRS-7015-111, 114, 115
SU020	SULFATE SUMP - JRS-J-664, 6902-163
SU021	#10 SUMP - JRS-7125-184
SU022	#1 HOT PIT SUMP - JRS-6494-114
SU024	SLURRY STORAGE SUMP -
SU025	11-37 TRUCK PAD -
SU026	SPA N SUMP -
SU027	SULFURIC LOADING PAD -
SU028	#1 & #2 ORE THICKENER SUMP -
SU029	SPA CHEMICAL BLDG SUMP -
SU030	300 AMMSOX SUMP - JRS-6732-154, FP-6733-144
SU032	BLEND PAD SUMP -
SU033	MOBILE SHOP SUMP -
SU034-MI	APP RECLAIM WATER SUMP - JRS-7520-M-284
PN003	EAST OVERFLOW POND #2 PAD
GE012	NITRIC ACID PAD

PROCESS SUMPS AND PADS  
PLOT PLAN OF DON PLANT COMPLEX

J. R. SIMPLOT COMPANY  
AGRIBUSINESS  
POCATELLO, IDAHO

JRS-8345-357



Revised JAN 2017

## Appendix 6

### RCRA Project Narrative and Compliance Schedule





## Appendix 6

### RCRA Project Narrative & Compliance Schedule

Don Plant

Final

May 23, 2023

Corporate Environmental & Regulatory Affairs  
1099 W. Front St., Boise, ID 83702  
(208) 780-7303



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The following project timelines provide a general plan for completion of the compliance projects (“Compliance Projects”) required by the Consent Decree. The length of time required is influenced by engineering requirements, permitting and approvals, equipment lead times, a limited seasonal construction window, coordination with plant turnarounds, training development, and coordination with employee work schedules.

## **1 Project 1: Acid Value Recovery & Wash Solution System in Phosphoric Acid Plant**

The Acid Value Recovery System and wash solution system in the phosphoric acid plant (“Phosphoric Acid Plant”) project will install new tank(s), pumps, piping and controls to enable Simplot to recover the value of cleaning wastes and other materials as designated in the Facility Report. In addition, the Acid Value Recovery System will enable Simplot to recover spills and leaks in Containable Impervious areas, Predominately Containable areas, and Semi-Segregable areas. The Acid Value Recovery System effluent must be reused as identified in the Facility Report.

Milestones: The following milestones provide a general plan for the start of each phase counting from the date of Simplot’s signature of the Consent Decree:

- |   |          |
|---|----------|
| • Engineering/Development of project                  | month 16 |
| • Permitting with Regulatory Agency                   | month 28 |
| • Detailed Design                                     | month 30 |
| • Project Approval                                    | month 33 |
| • Initiate Field Construction (site prep, foundation) | month 38 |
| • Tank Fabrication Initiated                          | month 47 |
| • Tank Fabrication Completion                         | month 57 |

Completion: The following dates are enforceable dates upon which, following the date of Simplot’s signature of the Consent Decree, Simplot must complete construction and implement Project 1:

- |   |          |
|---|----------|
| • Project Completion                                | month 66 |
| • Start-up and Documentation of Training Completion | month 70 |



## 2 Project 2: Recovery System Return Piping

The recovery system return piping (“Recovery System Return Piping”) project will install new piping to enable Simplot to: (1) clean phosphoric acid lines from the Phosphoric Acid Plant up to Granulation and SPA and return those cleaning wastes to the Acid Value Recovery System; (2) clean SPA Recovery Units and Acid Value Recovery Units and return those cleaning wastes to the Acid Value Recovery System and/or direct to Upstream Operations/Mixed-Use Units; (3) recover cleaning wastes or other materials from Upstream Operations or Mixed-Use Units that were cleaned utilizing Acid Value Recovery Tank effluent; (4) recover other materials from SPA Recovery Units and Acid Value Recovery Units and return those materials to the Acid Value Recovery System or direct to Upstream Operations/Mixed-Use Units as designated in the Facility Report and/or direct to Granulation; and (5) recover high acid content material from Semi-Segregable sumps to the Acid Value Recovery Tank and/or to a phosphoric acid storage tank as designated in the Facility Report. Upon completion, the Recovery System Return Piping will be operated in association with the Acid Value Recovery System as identified in the Facility Report.

Milestones: The following milestones provide a general plan for the start of each phase counting from the date of Simplot’s signature of the Consent Decree:

- |                                      |          |
|--------------------------------------|----------|
| • Engineering/Development of project | month 16 |
| • Detailed Design                    | month 30 |
| • Project Approval                   | month 33 |
| • Initiate Field Construction        | month 38 |

Completion: The following dates are enforceable dates upon which, following the date of Simplot’s signature of the Consent Decree, Simplot must complete construction and implement Project 2:

- |   |          |
|---|----------|
| • Project Completion                                | month 66 |
| • Start-up and Documentation of Training Completion | month 70 |

## 3 Project 3: Granulation Recovery & Wash Solution System in Granulation Plant

The Granulation Recovery System and Wash Solution System in Granulation Plant project is already installed and operational at the Simplot Don Plant Facility.



#### **4 Project 4: Additional Granulation Recovery Tank as Needed**

Based on Simplot's determination, an additional Granulation Recovery Tank may be installed near the granulation plants to improve the capture of spills, leaks, and cleaning solutions so materials may be returned to the granulation process via the Granulation Recovery System, as identified in the Facility Report. During the initial baseline performance period described in the BMP, Simplot will evaluate if an additional Granulation Recovery Tank is desired.

Milestones: The following milestones provide a general plan for the start of each phase counting from the date of Simplot's signature of the Consent Decree:

- Review of existing spill/leak and cleaning solution recovery back to granulation process month 0
- Decision if additional tank desired month 12

The following milestones apply only if it is decided an additional tank is desired:

- Engineering/Development of project, if needed month 24
- Permitting with Regulatory Agency month 36
- Detailed Design month 42
- Project Approval month 45
- Initiate Field Construction month 50

Completion: The following dates are enforceable dates only if it is decided an additional tank is desired, upon which, following the date of Simplot's signature of the Consent Decree, Simplot must complete construction and implement Project 4:

- Project Completion month 70



## 5 Project 5: BMP Training

Site-specific RCRA and BMP training will be developed and implemented for all affected employees, maintenance personnel, and contractors in the Phosphoric Acid and Granulation plants, along with facility management, and others who manage waste streams covered by the CD. The training will incorporate pertinent lessons learned from implementation, training, and operation of the Rock Springs BMP.

Milestones: The following milestones provide a general plan for the start of each phase counting from the date of Simplot's signature of the Consent Decree:

- Develop Training month 0
- Initiate Training month 3

Completion: The following dates are enforceable dates upon which, following the date of Simplot's signature of the Consent Decree, Simplot must complete construction and implement Project 5:

- Training Completion month 9

## 6 Project 6: Lining the West Gypsum Stockpile

The West Gypsum Stockpile stores conditioned gypsum<sup>1</sup> that is used periodically for supplementing dike construction, liner extensions for the existing gypsum stack compartments against native terrain, and future planned lateral expansions to the East and South of the existing stack system. The existing stockpile will be depleted as shown in the milestones below.

If Simplot desires to establish a new stockpile of conditioned gypsum that is not located on the existing lined gypsum stack, the stockpiled gypsum will be placed within the footprint of the gypsum stack atop an installed liner meeting the requirements of Appendix 1. Having the stockpile on a liner will allow continued storage and use of conditioned gypsum without concerns of COC's seeping into the native ground and underlying aquifer.

Milestones: The following milestones provide a general plan for the start of each phase counting from the date of Simplot's signature of the Consent Decree:

- |  |              |
|--|--------------|
| • Cease Adding Conditioned Gypsum to Unlined Areas | January 2022 |
| • Depletion of Existing Stockpile                  | month 49     |
| • Engineering/Development of New Stockpile Project | month 49     |
| • Construction Permitting with Regulatory Agency   | month 55     |
| • Construction                                     | month 63     |

Completion: The following dates are enforceable dates upon which, following the date of Simplot's signature of the Consent Decree, Simplot must implement Project 6:

- |  |          |
|--|----------|
| • Depletion of Existing Stockpile  | month 49 |
| • Project Completion (if build new stockpile not located on lined stack)     | month 66 |
| • Project Completion Approval (for new stockpile not located on lined stack) | month 70 |

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<sup>1</sup> Conditioned gypsum is gypsum that has dried in the phosphogypsum stack cell, removed, and then set aside for construction purposes. Process (wet slurry) phosphogypsum is not conditioned gypsum.



## **7 Project 7: Installation of Run-Off Controls**

Portions of the Gypsum Stack may not be equipped with controls that adequately contain storm water run-off from off-site conveyance. Additionally, some run-off collects in unlined swales where the water can percolate through the ground surface (see Figure 1). A project will be performed that will include lining areas where run-off collects to mitigate potential offsite run-off transmission and potential percolation to groundwater.

Milestones: The following milestones provide a general plan for the start of each phase counting from the date of Simplot's signature of the Consent Decree:

- Engineering/Development of Project month 49
- Construction Permitting with Regulatory Agency month 55
- Construction month 63

Completion: The following dates are enforceable dates upon which, following the date of Simplot's signature of the Consent Decree, Simplot must complete construction and implement Project 7:

- Project Completion month 66
- Project Completion Approval month 70





Figure 1: Project 7 Run-off Swale Areas



## Appendix 7

### Alternative Liner Demonstration

Appendix 7  
Alternative Liner Demonstration

Don Plant

Final

October 7, 2021



Ardaman & Associates, Inc.

Geotechnical, Environmental and  
Materials Consultant

September 1, 2021  
File Number 19-13-0079B

J.R. Simplot Company  
P.O. Box 27  
Boise, Idaho 83707

Attention: Mr. Alan L. Prouty  
Vice President, Environmental & Regulatory Affairs

Subject: Alternative Liner Demonstration, Expansions of the Don Plant  
Phosphogypsum Stack System, J.R. Simplot Company, Pocatello, Idaho

Gentlemen:

As requested, Ardaman & Associates, Inc. has prepared this letter to document our analyses demonstrating that an HDPE geomembrane liner in contact with sedimented gypsum placed in slurry form provides an equivalent or superior degree of protection to a Composite Liner designed and installed in accordance with the requirements of Section VI of Appendix 1-B of the proposed Consent Decree between the United States, the State of Idaho and the J.R. Simplot Company (Consent Decree).

The analyses indicate that the potential leakage from the liner system currently being used for vertical and lateral expansions at the Don Plant is less than the potential leakage from the soil-geomembrane composite liner or gypsum-geomembrane alternative specified in Section VI, Appendix 1B of the proposed Consent Decree.

The Phosphogypsum Stack Liner design standards provided in Section VI, Appendix 1-B require that Phosphogypsum Stacks be constructed atop a Composite Liner or an approved alternative pursuant to Paragraph 25 and Appendix 7 of the proposed Consent Decree. The synthetic component of Composite Liners required by the Design Standards consists 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.

The non-synthetic component of Composite Liners required by the Design Standards consists of one of the following:

- (a) Soil. A layer of mechanically compacted soil at least eighteen (18) inches thick, placed below the Geomembrane, with a maximum hydraulic conductivity of  $1 \times 10^{-7}$  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 for soil components of composite Liners.
- (b) Phosphogypsum. A layer of mechanically compacted Phosphogypsum at least twenty-four (24) inches thick, placed above the Geomembrane, with a maximum hydraulic conductivity of  $1 \times 10^{-4}$  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 expansion where Phosphogypsum slurry is discharged into the expansion area within one (1) year of completion of construction as described in Appendix 7.
- (c) An alternative composite liner that is equal or superior to (a) or (b) above or provides an equivalent or superior degree of protection for human health and the environment. Liner equivalency is addressed in Paragraph 25b of the proposed Consent Decree and in Section VI of Appendix 1B.

### **Alternative Liner Demonstration**

Ardaman & Associates, Inc., has designed and monitored the construction of many phosphogypsum stacks throughout the world, including the vertical and lateral expansions of the Phosphogypsum Stack System at the Simplot Don Plant, and has worked closely with the Florida Department of Environmental Protection (FDEP) in developing the rules governing the design of phosphogypsum stacks and other solid waste landfills in Florida. Although lined phosphogypsum stacks contain an internal seepage collection and removal system, the requirement for maintaining sedimentation ponds on top of the stack, which is continually rising, results in a much larger hydraulic head on the bottom liner than typically experienced in most utility ponds or other solid waste landfills. Nevertheless, experience over the last 25 years has confirmed that the liner systems required by the FDEP's Phosphogypsum Management Rule and included by the U.S. Environmental Protection Agency (EPA) within Appendix 1B of the proposed Consent Decree, minimize groundwater discharges and are protective of groundwater quality in the aquifer systems beneath and surrounding lined phosphogypsum stacks.

The liner system used for Vertical Expansions at the Don Plant consists of a 60-mil HDPE geomembrane placed on a prepared compacted phosphogypsum base and includes a

minimum twenty-four inch thick compacted phosphogypsum layer placed above the geomembrane only along the alignment of the stack underdrains and phosphogypsum starter dikes. Elsewhere, the 60-mil HDPE geomembrane liner will be directly overlain by sedimented phosphogypsum deposited in slurry form after the lined storage compartment is activated.

The liner system used for Lateral Expansions at the Don Plant consists of a 60-mil HDPE liner placed on a prepared natural ground base and will include a minimum twenty-four-inch thick compacted phosphogypsum layer placed above the geomembrane for areas flatter than 2.5H:1.0V, areas where the geomembrane would be permanently exposed, and along the alignment of the stack underdrains and gypsum starter dikes. Elsewhere, the geomembrane will be directly overlain by sedimented phosphogypsum deposited in slurry form.

The analyses presented in this report demonstrate that the proposed liner system has an expected leakage rate that is equal to or lower than the predicted leakage from the design standard composite liner systems specified in Appendix 1B of the proposed Consent Decree.

Lining of the existing gypsum stack, which began in 2010, is being performed as a source control action to reduce seepage and loading of phosphorus and other contaminants of concern (COCs) to groundwater beneath the stack. The primary objective of the lining project is to reduce seepage of low pH process water from the formerly unlined phosphogypsum stack to groundwater from approximately 900 gallons per minute (prior to lining) to less than a gallon per minute (after lining).

### **Leakage through Liner Systems**

Geomembranes are essentially impervious to liquid flow. However, pinholes, seam or joint imperfections, and other defects are generally assumed to be present in a geomembrane installation even when a thorough quality assurance plan is implemented to minimize the presences of such defects. Direct permeation through a geomembrane liner is negligible (vapor transmission of less than 0.24 grams per square meter per day) compared to the leakage through a manufacturing or installation defect. Therefore, only leakage through defects will be considered in this evaluation. The contact between the phosphogypsum and the geomembrane has been shown to be perfect for both sedimented phosphogypsum or compacted phosphogypsum placed on top of the geomembrane<sup>1</sup>. The contact between the geomembrane and the clay liner for the geomembrane-clay composite liner system alternative, where compacted clay is placed beneath rather than above the flexible geomembrane, may be good but is generally less than perfect because of the presence of wrinkles in the geomembrane and irregularities in the clay liner surface. A tiny gap between the geomembrane and the compacted clay

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<sup>1</sup> Garlanger, J.E., Fuleihan, N.F., and Riad, A.H. (1994). Leakage Rates through Geomembrane Liners beneath Phosphogypsum Disposal Facilities, Proceedings of the Fifth International Conference on Geotextiles, Geomembranes and Related Products, Singapore.

component would, therefore, allow water to flow radially away from any defect in the geosynthetic liner<sup>2</sup>.

Leakage through a defect (hole) in a geomembrane underlying a phosphogypsum stack is a function of the size of the hole, the effective saturated hydraulic conductivity of the phosphogypsum material directly above the hole, the vertical hydraulic conductivity of any phosphogypsum in the hole, the saturated hydraulic conductivity of the soil/gypsum beneath the geomembrane and the total head difference across the liner system. The saturated hydraulic conductivity of gypsum within the stack in turn depends on the size of the gypsum particles and the *in situ* gypsum density.

### Size and Frequency of Defects

If a thorough inspection, quality assurance and quality control testing program is implemented during geomembrane installation, independent from that performed by the installer, as proposed for the Don Plant Phosphogypsum Stack System, a geomembrane liner nearly free from defects should be possible. Nevertheless, it is common to assume that up to 2 defects per acre, each consisting of a hole 2 millimeters in diameter, may remain undetected. This is double the number of defects observed and recommended by Giroud and Bonaparte (1989)<sup>2</sup> and GeoSyntec Consultants (1992)<sup>3</sup> for a good installation. To account for potential defects generated during placement and compaction of a phosphogypsum layer placed above the geomembrane, the number of defects is increased to twice the number of defects assumed for geomembrane liners associated with sedimented phosphogypsum cover.

### Predictive Models

For predicting leakage through defects in a geomembrane liner overlain by gypsum in perfect contact with the geomembrane liner, the following equation was developed (Wissa and Fuleihan, 1993<sup>4</sup>; and Garlanger et al, 1994<sup>1</sup>):

$$Q = \frac{4 k_m r_d h}{1 + \frac{4 t k_m}{\pi r_d k_v}} \quad (1)$$

where "Q" is the leakage rate through the hole; "k<sub>m</sub>" is the effective coefficient of permeability of the gypsum immediately above the liner (which for an anisotropy ratio of 2 is equal to √2 times the vertical coefficient of permeability); "k<sub>v</sub>" is the vertical coefficient of permeability of gypsum in the hole; "h" is the hydraulic head across the liner; "r<sub>d</sub>" is the radius of the hole; and "t" is the thickness of the geomembrane.

<sup>2</sup> Giroud, J.P. and Bonaparte, R. (1989). Leakage through Liners Constructed with Geomembranes – Part I. Geomembrane Liners, Geotextiles and Geomembranes, Vol. 8, No. 1.

<sup>3</sup> GeoSyntec Consultants (1992). Review of Data on Geomembrane Defects in Lining Applications, Prepared for Florida Phosphate Council, Inc.

<sup>4</sup> Wissa, A.E.Z. and Fuleihan, N.F. (1993). Design and Reclamation of Phosphogypsum Disposal Sites, Proceedings of the AIChE Symposium on Advances in Phosphate Fertilizer Technology, AIChE, N.Y.

For the geomembrane-compacted clay composite liner, Giroud et al (1992)<sup>5</sup> proposed a methodology for calculating leakage through liner defects for the case where the hydraulic gradient was greater than unity. Based on their investigations, the rate of leakage through a circular hole in a geomembrane where there is “good” (i.e., neither “poor” nor “perfect”) contact between the geomembrane and the underlying compacted clay can be computed using the following semi-empirical equations:

$$R = 0.26 a^{0.5} h_w^{4.5} k_s^{-1.3} \quad (2)$$

$$Q = k_s \left[ 1 + \frac{h_w}{2H_s \ln(R/R_o)} \right] \pi R^2, \quad (3)$$

where,

R	=	radius of wetted area (m)
a	=	area of circular hole in geomembrane (m <sup>2</sup> )
h <sub>w</sub>	=	head of liquid on top of geomembrane (m)
k <sub>s</sub>	=	hydraulic conductivity of clay liner component (m/sec)
R <sub>o</sub>	=	radius of hole in geomembrane (m)
Q	=	leakage rate through hole in geomembrane (m <sup>3</sup> /sec)
H <sub>s</sub>	=	thickness of clay liner soil component (m)

Note that Equations 2 and 3 are not dimensionless and, hence, the parameters must be expressed in metric units, as indicated above.

### Gypsum Properties

In contrast to many other waste products (e.g., municipal solid waste), phosphogypsum is characterized by a moderately low hydraulic conductivity. Phosphogypsum is transported to a phosphogypsum stack as a slurry having a solids content typically in the range of 20 to 30 percent. Upon contact with the quiescent water in the phosphogypsum pond, the silt-sized gypsum particles settle and form a sedimentary deposit across the bottom of the pond. As more sediment forms, the density of the buried gypsum increases because of self-weight consolidation and secondary compression (creep). When the bottom of the gypsum stack is lined with a geomembrane, the sedimented gypsum is in full, intimate contact with the geomembrane. Any defects in the geomembrane will therefore be in contact with the gypsum and, if the size of the defect is larger than the size of a gypsum particle (i.e., if the radius of the hole in the geomembrane is greater than 0.05 mm), gypsum particles will be forced into the defect by the seeping water. The resulting seepage forces will consolidate the gypsum surrounding and filling the defect to a density greater than that of the adjacent gypsum. This was demonstrated by the tests

<sup>5</sup> Giroud, J.P., Badu-Tweneboah, K. and Bonaparte, R. (1992). Rate of Leakage through a Composite Liner due to Geomembrane Defects. Geotextiles and Geomembranes, 11, Page 1 28.



performed by Garlanger et al (1994)<sup>1</sup> during development of the Florida Phosphogypsum Management Rule (17-763 FAC).

During the past several years, Ardaman & Associates, Inc. (Ardaman), has obtained samples of gypsum at different depths from many of the existing phosphogypsum stacks in Central Florida for the purpose of measuring density, hydraulic conductivity, and strength. Ardaman has also conducted field sampling and laboratory materials testing programs of the J.R. Simplot Don Plant phosphogypsum deposits. The best-fit relationships between dry density ( $\gamma_d$ ) and depth (d) for Don Plant phosphogypsum can be written as  $\gamma_d = 57 + 0.309*d - 0.0004d^2$ . The best-fit relationship between vertical hydraulic conductivity ( $k_v$ , cm/sec) and void ratio (e) for Don Plant phosphogypsum can be written as  $5.28 \times 10^{-5} * e^{3.74}$ , respectively. These relationships are used below to predict the hydraulic conductivity of the sedimented gypsum above a hypothetical defect in a geomembrane liner for a range of stack heights.

#### Predicted Leakage Rates through a 2-mm Diameter Defect in Geomembrane

The leakage rate through a 2-mm diameter defect in a 60-mil thick HDPE liner overlying a 2-foot thick compacted gypsum base with a saturated hydraulic conductivity of  $1 \times 10^{-4}$  cm/sec or less and underlying sedimented phosphogypsum can be calculated by solving Equations 1 and 3 simultaneously for differing stack heights, assuming the hydraulic head across the liner system is equal to the stack height and considering flow continuity and hydraulic head loss compatibility conditions.

The hydraulic conductivity above and within the defect can be determined based on the relationships with void ratio provided above. The void ratio of the phosphogypsum above and within the defect can be determined using the relationships between dry density and depth provided above. The predicted leakage rates for liner systems with two 2-mm diameter defects per acre beneath facilities storing Simplot sedimented phosphogypsum are provided as a function of stack height in Table 1. Also shown are the predicted leakage rates for liner systems with four 2-mm defects overlain with two feet of compacted phosphogypsum with a documented hydraulic conductivity for Don Plant phosphogypsum of  $0.6 \times 10^{-4}$  cm/sec. As expected, the leakage rate initially increases with increased stack height due to the increase in applied hydraulic head. At greater heights, however, the reduction in the hydraulic conductivity of the gypsum above the liner as the stack rises results in a reduction in the leakage rate despite the continued linear increase in hydraulic head.

The leakage rates for the two composite liner alternatives required in Appendix 1B of the proposed Consent Decree are provided for comparison. As can be seen, the predicted leakage rates for the Don Plant with sedimented or compacted phosphogypsum above the liner and compacted phosphogypsum below the liner is substantially smaller than for the two composite liner designs specified in Appendix 1B of the proposed Consent Decree.

It should be mentioned that the leakage rates presented in Table 1 neglect to consider the beneficial effect of other important design features in the liner system of a phosphogypsum stack. For example, the drain system constructed within the gypsum above the geomembrane would cause a reduction in the average hydraulic head above the liner, and, hence, a reduction in the average leakage rate from the facility. This reduction is not accounted for in the results presented in Table 1. The above calculations also neglect the increase in effective stress resulting from the seepage forces through the gypsum above and within the defect. The increased effective stress would result in lower void ratios and smaller hydraulic conductivities than those used in the above analyses, i.e., the calculations overpredict the leakage rates for the liner systems.

**Table 1**  
**Comparison of Predicted Leakage Rates for Liner Alternatives**

Stack Height, ft	Leakage Rate, inches/year			
	Sedimented Gypsum above Liner on Compacted Gypsum Base (2 defects per acre)	Compacted Gypsum above Liner on Compacted Gypsum Base (4 defects per acre)	Compacted Gypsum above Liner per Appendix 1B (4 defects/acre)	Compacted Clay Below Liner per Appendix 1B (2 defects/acre)
5	0.003	0.006	0.010	0.013
10	0.006	0.013	0.021	0.028
30	0.010	0.037	0.062	0.097
50	0.010	0.062	0.075	0.219
75	0.008	0.056	0.057	0.402
100	0.005	0.038	0.038	0.632
150	0.002	0.018	0.017	1.285
200	0.001	0.009	0.009	1.969

The effect of using an upper liner component of compacted gypsum on the predicted leakage rate for vertical expansions of the Don Plant phosphogypsum stack system is also presented in Table 1. As shown, the hydraulic conductivity of the Don Plant sedimented phosphogypsum is so low that the placement of a 2-foot thick compacted gypsum layer on top of the synthetic liner with a hydraulic conductivity of  $0.6 \times 10^{-4}$  cm/sec does not result in a reduction in the expected leakage for vertical expansions and, therefore, does not justify the substantial added cost and associated risk of potential damage to the liner resulting from construction of a compacted gypsum cover over the synthetic liner. The predicted leakage rates with compacted phosphogypsum both above and below the liner is also significantly smaller than for the two composite liner designs specified in Appendix 1B of the proposed Consent Decree.

The predicted leakage rate through two 2-mm diameter defects in a 60-mil HDPE liner overlying an 18-inch thick layer of compacted clay with a saturated hydraulic conductivity of  $10^{-7}$  cm/sec was calculated using Equations 2 and 3 for various hydraulic heads above the liner ignoring any head loss through the sedimented gypsum overlying the

geomembrane and ignoring any decrease in the hydraulic conductivity resulting from compression of the clay component of the composite liner under the weight of the overlying phosphogypsum.

#### Predicted Leakage Rates for Future Vertical Expansions

Future Lined Vertical Expansions at the Don Plant will be designed, permitted, and constructed in the same way that previous Lined Vertical Expansions have been designed, permitted, and constructed at the Don Plant. The geomembrane liner will be installed above a compacted phosphogypsum base both on relatively flat surfaces and on the steeper slopes. Sedimented phosphogypsum will build up on both the flat areas and the steeper (< 2.5H:1.0V) slopes. Some return water will temporarily accumulate above the sedimented phosphogypsum against the steeper slopes. The depth of return water temporarily present against the steeper slopes typically varies from 2 to 20 feet. The length of inundated slope for the lined vertical expansions of the phosphogypsum stack at the Simplot Don Plant with a total lined acreage of approximately 230 acres is less than 8,000 feet, i.e., approximately 3.8 acres of geomembrane liner is temporarily below up to 20 feet of ponded water. Stack height for the Don Plant typically rises at a rate of approximately 10 feet per year.

The predicted leakage rate under these conditions for the life of the lined phosphogypsum stack using Equations 1, 2, and 3 above with two 2-mm diameter defects per acre varies from less than 0.034 to less than 0.051 in/year and averages less than 0.039 in/year. The average annual seepage rate over the next 30 years is predicted to be less than 0.42 gpm.

#### Predicted Leakage Rates for Future Lateral Expansions

Future Lined Lateral Expansions at the Don Plant will be designed, permitted, and constructed in the same way that existing Lined Lateral Expansions have been designed, permitted, and constructed at the Don Plant. Geomembrane Liners above flat to moderately sloping areas, permanently exposed areas, and areas along the alignment of the gypsum starter dikes and stack underdrains will be covered with two feet of compacted phosphogypsum with a hydraulic conductivity no greater than  $6 \times 10^{-5}$  cm/sec. Sloped areas steeper than 2.5H:1V will be covered with sedimented phosphogypsum. As with the vertical expansions there may be times during filling that the exposed liner is inundated under 2 to 20 feet of water. Based on a total lined area of approximately 185 acres with approximately 170 acres covered with compacted phosphogypsum, 15 acres covered with sedimented gypsum, and approximately 1 acre of temporarily inundated liner, the predicted average leakage rate over the life of the proposed East Valley Expansion, computed using Equations 1, 2, and 3 and assuming four 2-mm diameter defects for the liner beneath the compacted phosphogypsum and two 2-mm diameter defects in the remaining areas, varies from less than 0.006 to less than 0.065 inches/year and averages less than 0.033 inches/year. The average annual seepage rate for the East Valley Expansion over the next 40 years is predicted to be less than 0.18 gpm.

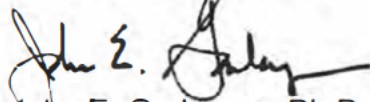
Based on a total lined area of approximately 100 acres with approximately 60 acres covered with compacted phosphogypsum, 40 acres covered with sedimented gypsum, and approximately 1 acre of temporarily inundated liner, the predicted average leakage rate over the life of the proposed South Valley Expansion, computed using Equations 1, 2, and 3 and assuming four 2-mm diameter defects for the liner beneath the compacted phosphogypsum and two 2-mm diameter defects in the remaining areas, varies from less than 0.044 to less than 0.145 inches/year and averages less than 0.087 in/year. The average annual seepage rate for the South Valley Expansion over the next 40 years is predicted to be less than 0.21 gpm.

### **Summary and Conclusions**

The analyses described above demonstrate that the alternative liner systems proposed for the J.R. Simplot Don Plant lined Phosphogypsum Stack consisting of a 60-mil HDPE geomembrane placed on natural ground or on a compacted gypsum base and covered with sedimented or compacted gypsum is equivalent in terms of predicted leakage rates to the design standard liner systems specified in Appendix 1B of the proposed Consent Decree.

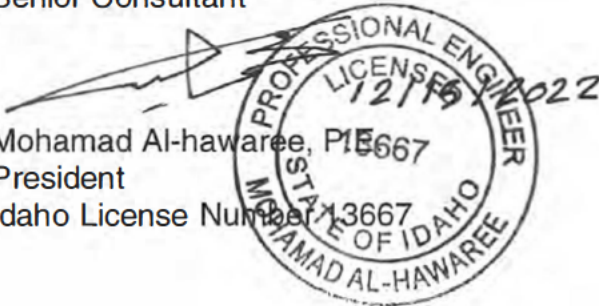
We trust that the demonstrations contained herein meets your immediate needs. If you have any questions or need any additional clarification, please do not hesitate to contact us.

Very truly yours,  
ARDAMAN & ASSOCIATES, INC.



John E. Garlanger, Ph.D., P.E.  
Senior Consultant

Mohamad Al-hawaree, P.E. 667  
President  
Idaho License Number 13667



## Appendix 8

### Initial Closure Plan for the Facility

NOTE - REDACTED FOR ASSERTED  
CONFIDENTIAL BUSINESS INFORMATION

**General Closure Plan and Closure  
Cost Estimate for the Existing Phosphogypsum Stack System**

**J.R. Simplot Company  
Don Plant Pocatello, Idaho**

**CONFIDENTIAL BUSINESS INFORMATION**



**Ardaman & Associates, Inc.**

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**MEMBERS:**

A.S.F.E.  
American Concrete Institute  
ASTM International  
Florida Institute of Consulting Engineers

**CONFIDENTIAL**

This document contains financial and other information pertaining to plant operations, production rates and life expectancy. J.R. Simplot Company considers the enclosed information to be confidential and proprietary and requests that IDEQ and EPA maintain this document in a confidential file, not subject to release to the general public.

**CONFIDENTIAL**



Ardaman & Associates, Inc.

Geotechnical, Environmental and  
Materials Consultants

September 1, 2021  
File Number 19-13-0079A

J.R. Simplot Company  
Minerals & Chemicals Division  
P.O. Box 912  
Pocatello, Idaho 83204

Attention: Mr. Alan L. Prouty  
Vice President, Environmental & Regulatory Affairs

Subject: Revised General Closure Plan and Closure Cost Estimate for the Don Plant  
Phosphogypsum Stack System, J.R. Simplot Company, Don Plant, Pocatello,  
Idaho

Gentlemen:

As requested, Ardaman & Associates, Inc. has prepared a general closure plan and closure cost estimate for the current footprint and expected configuration of the existing phosphogypsum stack system at the J.R. Simplot Company, Don Plant facility in Pocatello, Idaho, assuming facility closure at the end of calendar year 2025, i.e., 5 years in the future, prior to construction of any additional lateral expansions. The gypsum stack configuration utilized for the cost estimate contained herein includes the lined and unlined footprint of the existing gypsum storage compartments, associated perimeter process water conveyance ditches and the lined process return water ponds and pump stations. The closure design and cost estimates contained herein meet the requirements of Appendix 1.C. (Closure of Phosphogypsum Stacks/ Phosphogypsum Stack Systems/Components) of the recently finalized Consent Decree between the United States and the J.R. Simplot Company for the Rock Springs, Wyoming facility. Closure in 2025 is considered to represent the condition when the cost for closure, water management/treatment, and long-term care for the current lined footprint of the Don Plant phosphogypsum stack system would be the most expensive.

The closure cost estimates, water management and long-term maintenance costs provided herein are based on recent experience with similar ongoing and completed projects in the Central Florida area, using recently updated 2018 construction cost unit rates and 2018 unit rates for long-term care. The estimated unit construction costs were compared to costs incurred for ongoing construction activities at other facilities and adjusted as necessary for site-specific construction cost information, and with a regional correction factor based on conventional cost estimating standards (2018 RS Means, Heavy Construction Cost Data). The closure cost estimates included in this report have been prepared and will be used as the basis for establishing proof of financial assurance, as required by the U.S. Environmental Protection Agency (EPA) based on the Consent Decree for the Rock Springs, Wyoming facility. The estimated closure, water management and long-term maintenance costs contained in this report are based on December 2018 dollars.



Contained in this report is a general overview of the existing facility with a conceptual closure plan and schedule of closure. Also included is an estimate of closure construction costs, water management costs and long-term maintenance and operating costs for the closed phosphogypsum stack system, based on the existing facility footprint and anticipated 2025 configuration. In preparing this closure plan and related cost estimates, we have relied on information supplied by J.R. Simplot and made assumptions relative to plant operating schedules, production rates, adjacent land and facility uses, gypsum stack growth and management, etc. These assumptions are listed in Section 3 of this report. The assumptions were made for cost estimating purposes and are subject to change.

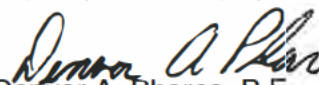
Relative to closure and post-closure water management, this plan deviates from the way treatment and consumption of process water is handled at phosphoric acid plants in wet climates. Because of the dry climate in Pocatello, J.R. Simplot will be able to evaporate a significant portion of the ponded and drainable process water at this facility. A portion of the process water will be partially evaporated and permanently retained in the lined phosphogypsum stack. The remaining drainage water will be treated using conventional limestone-lime neutralization. The treated water and treatment residue will be evaporated and/or stored in lined ponds constructed on top of the phosphogypsum stack. No treated water will be discharged into adjacent surface waters.

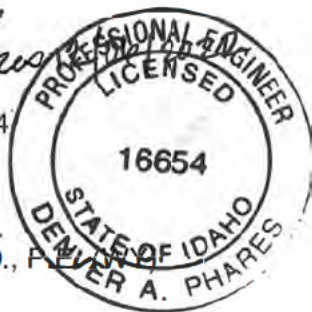
Utilization of this treatment and disposal method will require that completion of closure construction activities for portions of the existing facility be extended beyond the closure period that would be required for an unlined phosphogypsum stack system. However, because the significant portions of the active Don Plant phosphogypsum stack system have already been provided with a 60-mil HDPE geomembrane bottom liner, the additional closure period will not increase the potential for groundwater discharges from the facility.


This report has been prepared in accordance with generally accepted geotechnical engineering practices for the exclusive use of the J.R. Simplot Company, for specific application to the above referenced project. No other warranty, expressed or implied, is made.

It has been a pleasure assisting you with this project and we look forward to assisting you with the detailed closure plan and closure permit application in due time. If you have any questions about this report or would like to discuss the proposed closure plan or cost estimates in greater detail, please do not hesitate to contact us.

Very truly yours,  
ARDAMAN & ASSOCIATES, INC.  
Certificate of Authorization No. 2360

  
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JEG/DAP

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## Section 1

**BACKGROUND****1.1 Site Location**

The phosphogypsum stack system for the J.R. Simplot Company, Don Plant Facility is located in Sections 7 and 18 of Township 6 South, Range 34 East, just west of Pocatello, Idaho. The approximate site location, superimposed on a reproduction of the United States Geological Survey quadrangle map for Michaud, Idaho, dated 1971 and photo inspected in 1974, is shown in Figure 1.

**1.2 Background**

Figures 2 through 4 are, respectively, recent aerial photographs and a topographic map of the Don Plant facility that shows the layout of the existing gypsum storage area, which is located south and southeast of the plant site and abuts natural ground mountainous terrain to the south. The original unlined gypsum storage area has undergone a phased construction and liner installation project that converted the existing system to a totally lined and contained facility for the placement of new phosphogypsum. The completed project consisted of site grading and installation of an impervious high-density polyethylene (HDPE) liner on top of the previously unlined phosphogypsum stack and portions of the adjacent natural ground surfaces in such a manner as to facilitate continued use of the existing gypsum storage area by stacking and vertical expansion on top of the lined areas.

The primary objective of the lining project was to completely contain the by-product gypsum, the associated stack operating system process waters and any runoff from the active gypsum storage area, entirely within the lined limits of the proposed vertical expansion, thereby minimizing future groundwater impacts at the site. Total phosphorus concentrations in the nearby Portneuf River have been declining in recent years, demonstrating the success of this project. Design concepts and details for the proposed vertical expansion are contained in an Ardaman & Associates engineering report titled: "Engineering Overview of Proposed Phosphogypsum Stack Lining Project, J.R. Simplot, Don Plant, Pocatello, Idaho", dated December 17, 2008, and subsequent detailed design drawings and technical specifications utilized for ongoing construction activities.

The total footprint area of the existing gypsum stack system is currently on the order of 500 acres, which consist of approximately 380 acres of lined area and 120 acres of unlined side slope area of the original gypsum stack. All gypsum slurry deposition, stacking operations and associated process water storage and return water systems are contained entirely within lined areas. No process water is currently placed or stored on unlined portions of the original gypsum stack side slope areas.

As shown on Figures 2 through 4, the gypsum storage in late 2019 was configured into three separate settling compartments, consisting of the original lined lower compartment (Phase 1), a combination of the upper lined areas (Phases 2, 3, 4, 5, 7A, 7B and 7E) and the lined lateral expansion area (Phase 6) The lower compartment at that time had a total top area of approximately 35 acres, with a top elevation near 4735 feet (NGVD). The uppermost compartment had a combined total top area of approximately 150 acres, with an average top elevation near 4930 feet (NGVD). The west expansion area had a total top area of approximately 40 acres, with an average top elevation near 4625 feet (NGVD), for a combined total top area of 225 acres.

## Section 2

**GENERAL CLOSURE PLAN AND SCHEDULE****2.1 Closure Schedule**

Although J.R. Simplot intends to continue to operate the Pocatello facility going forward, the closure plan and cost estimates presented herein are based on an assumed terminal gypsum stack geometry that is represented by the existing stack geometry, projected upward after five years of continued stack operation [REDACTED]

for assumed closure in 2025. The resulting stack geometry is considered to represent the condition when the cost for closure, water management/treatment, and long-term care for the current footprint of the Don Plant phosphogypsum stack system would be the most expensive.

The proposed water management plan for this facility relies on evaporation of a significant portion of excess process water during the initial 13-year period following deactivation. The drainage water seeping from the phosphogypsum stack will be treated with limestone and lime, with the treated water and associated lime sludge stored and evaporated in lined ponds that will be constructed on top of the closed phosphogypsum stack. The phosphogypsum stack system will be closed in phases as expeditiously as practicable. A discussion of the proposed closure phases and approximate schedule for implementation of each phase is provided below.

**2.2 Closure Design Concepts**

The phosphogypsum stack system will be closed in general accordance with the criteria contained in Appendix 1.C. of the recent consent decree between the United States and J.R. Simplot Company for the Rock Springs, Wyoming facility. In general, the proposed closure will consist of providing a final cover over the entire surface of the gypsum stack and associated process water ponds that will meet the performance standards in Appendix 1.C. In particular, the top gradient of the gypsum stack and pond surfaces will be provided with a relatively impervious HDPE liner and protective vegetated soil cover that will be graded to promote drainage and minimize ponding of rainwater or snow melt runoff on top of the lined surface. The side slopes of the stack will be provided with a final vegetated soil cover as needed to promote rainfall runoff and evapotranspiration, while reducing infiltration and controlling erosion of the side slope cover.

Considering continued gypsum stacking operations for a 5-year operation period, [REDACTED]

[REDACTED], it is anticipated that the projected geometry of the gypsum stack at the time of closure will be similar to that shown on attached Figures 5 and 6. As noted, the projected average top elevation for the lower compartment on the north side of the gypsum stack (Area 1) is 4,796 feet, NGVD, while the top elevation of the combined upper compartment (Areas 2, 3, 4, 5 and 7) will be on the order of 4,977 feet (NGVD). The top elevation on lowermost lateral expansion area (Area 6) is estimate at 4,658 feet (NGVD).

Closure design concepts for the existing phosphogypsum stack system are illustrated on Figures 7 through 12 with their associated details presented in Figures 13 through 31. The assumed dimensions of the phosphogypsum stack system at the time of closure (i.e., prior to regrading), and used as the basis of the closure cost estimate presented herein, is tabulated below:

Closure Component	Estimated Area at Time of Closure (acres)
Total Gypsum Stack Footprint	499
Gypsum Top Pond Areas*	188
Gypsum Side Slope Areas	258
Slope Swales & Toe Ditches	36
Return Water Surge Pond	17
Based on total top area, including some perimeter roads adjacent to natural abutments, which may not need to be lined.	

### 2.3 Process Water Management During Closure

The closure schedule for the Pocatello phosphogypsum stack system will be dictated to a certain extent by the need to store and manage/treat existing process water inventories during the closure period. Primary factors include the process water inventory at the time of plant shutdown, available storage capacity within the process water containment system, post-shutdown water balance, process water seepage rates from the closed phosphogypsum stack and the ability to transfer and manage/treat water volumes throughout the closure period.

Unlike the humid subtropical climate in the southeastern U.S., where annual rainfall normally exceeds lake evaporation, the climate in the Pocatello area is cold, semiarid, with evaporation rates far exceeding precipitation. The average rainfall near the Pocatello Don plant is on the order of 12.3 inches per year, with lake or pond evaporation rates of 43.3 inches per year, equating to a net ponded area evaporation loss of about 31.0 inches per year. Given the high evaporation rates for this area, the proposed water management plan for the Pocatello facility differs from those used in the humid subtropical climate of the Southeast U.S. During the first 13 years after the phosphoric acid plant ceases operations and the slopes of the phosphogypsum stack are being closed, any remaining ponded water as well as consolidation and drainage water seeping from the stack will be allowed to partially evaporate using pond or spray irrigation on top of the phosphogypsum stack and seep back into the stack, where it will be retained by surface water tension and adsorption in the phosphogypsum above the phreatic surface (water table) in the stack.

During the closure process, one objective is that the phosphogypsum water be managed so that fluoride atmospheric emissions will be no more than the emissions during plant operations. In general, fluoride emissions from a closed gypsum stack are expected to be lower than those in an operating stack for two reasons: the vapor pressure of fluoride gases will be reduced because the process water will be at a much lower temperature (and thus less likely to result in fugitive air emissions) and fluoride will be removed from the process water due to adsorption onto compounds in the gypsum stack or from the formation of solid calcium fluoride compounds in the gypsum stack.

Fluoride emissions during plant operations are proportional to combined solar and process heat load evaporation and fluoride concentration. Solar evaporation for the Don Plant is approximately 3.6 ac-ft/acre/year, which assuming an evaporative area of 150 acres at the time of plant closure, yields a solar evaporation loss of 540 acre-ft/year. Process heat evaporation at the Don Plant, based on an annual P<sub>2</sub>O<sub>5</sub> production of 440,000 tons/year, a process heat load of 7.0 MMBTU/ton,

heat of vaporization of 0.525 BTU/ton, and an evaporation factor of 0.75, is approximately 810 acre-ft year. After closure, evaporation from a wetted area will be solely a function of solar energy and will be no more than 3.6 ac-ft/year/acre. The ratio of total evaporation during operation to total evaporation during and after closure, assuming the wetted area remains at 150 acres, is 2.5.

Estimating fluoride emissions from phosphogypsum stacks has a number of technical challenges. Thus, all measurement methodologies have limitations. Potential methods include spectroscopy techniques or a mass balance approach. The following equation can be used to monitor the mass ratio during and after closure:

$$[\text{Eqn-1}]: \text{Mass Ratio} = (F_e A_e T_e) / (24 F_o A_o),$$

where  $F_e$  is the average dissolved fluoride concentration (mg/L) in the percolate (applied minus evaporated water) on the Sprayfield,  $A_e$  is the area (acres) of the Sprayfield,  $T_e$  is the duration (hours) of spray or ponded evaporation,  $F_o$  is the average concentration (mg/L) of dissolved fluoride in the process water during normal plant operations, and  $A_o$  is the ponded area (acres) on top of the operating stack system at the time of plant shut down.

To confirm that the atmospheric fluoride emissions are less than or equal to the emissions during plant operations, fluoride concentration will be measured in the liquid accumulating during a 24-hour period in a shallow pan placed at several locations within the Sprayfield at least once per month during Sprayfield operations and reported quarterly, along with the area of the Sprayfield and the duration of spraying. The average concentration of fluoride in the process water measured during the last year of normal operations and the size of the ponded area on top of the operating stack will be included in the quarterly report. The output of Equation-1 can be used to adjust either the size of the application area, the application period, or both to achieve the objective. Note, alternate methods, agreed upon by EPA, the State and Simplot, can be developed to demonstrate achievement of this objective.

As stated by EPA's consultant, if the mass ratio, defined as the mass of fluoride emitted during ponded or spray evaporation, is less than 2.5, the objective of no increase in atmospheric fluoride emission above that emitted during operations will be achieved. Other analytical methods or measurement techniques could also be used. These alternate methods, upon review and approval by EPA and Simplot, could be used to demonstrate achievement of this objective.

Similar practices for minimizing the potential for birds or other wildlife to land in a ponded area on the phosphogypsum stack under operating conditions, e.g., air cannons, scarecrows, etc., will be used around the application areas during irrigation.

Drainage water seeping from the phosphogypsum stack after 13 years will be neutralized with limestone and lime and then evaporated in lined sludge/evaporation ponds constructed on top of the closed phosphogypsum stack. The sludge/evaporation ponds will ultimately be closed by dewatering, drying and stabilization of the sedimented solids, and placement of a 1-foot thick, vegetated soil cover.

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 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 4 inches over the entire surface to be covered.

### 2.3.1 Existing Process Water Inventories

The Pocatello gypsum storage area is operated using conventional wet stacking techniques, wherein gypsum slurry is pumped at low percent solids to sedimentation ponds or compartment on top of the gypsum storage area. Clarified return water from the various sedimentation ponds on top of the gypsum stack is either decanted or siphoned from the individual ponds into lined perimeter toe ditches or swales, where it flows by gravity through various pipes and water level control structures into either of two lined return water surge ponds and pump stations, which are referred to herein as "Decant Ponds" (see Figure 2). Utilizing recent aerial photographs and pond water inventory information provided by J.R. Simplot Company personnel [REDACTED]

[REDACTED] This estimated volume is for ponded water only and does not include consolidation and drainage water that will seep out of the phosphogypsum stack over time. An estimate of the drainable pore volume within the gypsum stack is provided below.

### 2.3.2 Drainage Characteristics of Existing Gypsum Stack

The sedimented gypsum contained in the Pocatello gypsum stack is for the most part fully saturated with process water entrained within the pores of the individual gypsum crystals or particles. After the plant and gypsum stack are shut down (i.e., no gypsum slurry or process water pumped to the top of the stack), the entrained water in the pore spaces of the sedimented gypsum will drain from the stack by gravity over time. Since the gypsum storage area is provided with a 60-mil HDPE bottom liner, any water that drains from the stack with time will be collected in the existing or proposed seepage collection drains and/or in the existing perimeter flow channels at the toe of the stack. As the closed stack drains with time, the rate of seepage entering the seepage collection drains or perimeter flow channel will likewise diminish. The rate at which pore water drains from the stack is a key factor needed for development of a detailed water management plan at the time of final closure.

Gypsum stack consolidation and drainage rates used for the closure plan and schedule presented herein were estimated using a phosphogypsum stack seepage model developed on an Excel spreadsheet. The seepage model takes into consideration the varying height, geometry, initial and final density, hydraulic conductivity, and drainable porosity of the sedimented gypsum. Material properties used to develop the relationships needed for the drainage model were obtained from a previous engineering evaluation of the Pocatello gypsum stack (see Ardaman report titled: "Engineering overview of Proposed Phosphogypsum Stack Lining Project, J.R. Simplot Don Plant, Pocatello Idaho", dated December 17, 2008). The Excel spreadsheet that was used in these analyses was developed by Ardaman & Associates in collaboration with an expert retained by the US EPA to assist in technical issues associated with the proposed Consent Decree.

The gypsum stack model and analyses indicate that the *in situ* dry density of the sedimented gypsum for a 75-ft high phosphogypsum stack at terminal closure varies from approximately 57 lb/ft<sup>3</sup> at the top of the stack to approximately 77.8 lb/ft<sup>3</sup> at the bottom with an average dry density of 69 lb/ft<sup>3</sup>. After consolidation, the *in situ* dry density of the sedimented gypsum at terminal closure varies from approximately 75 lb/ft<sup>3</sup> at the top of the stack to approximately 88.2 lb/ft<sup>3</sup> at the bottom with an average dry density of 83 lb/ft<sup>3</sup>. The total volume of seepage expected during the 15-year closure period and 50-year long term care period is estimated at 5,090 acre-feet. It is anticipated



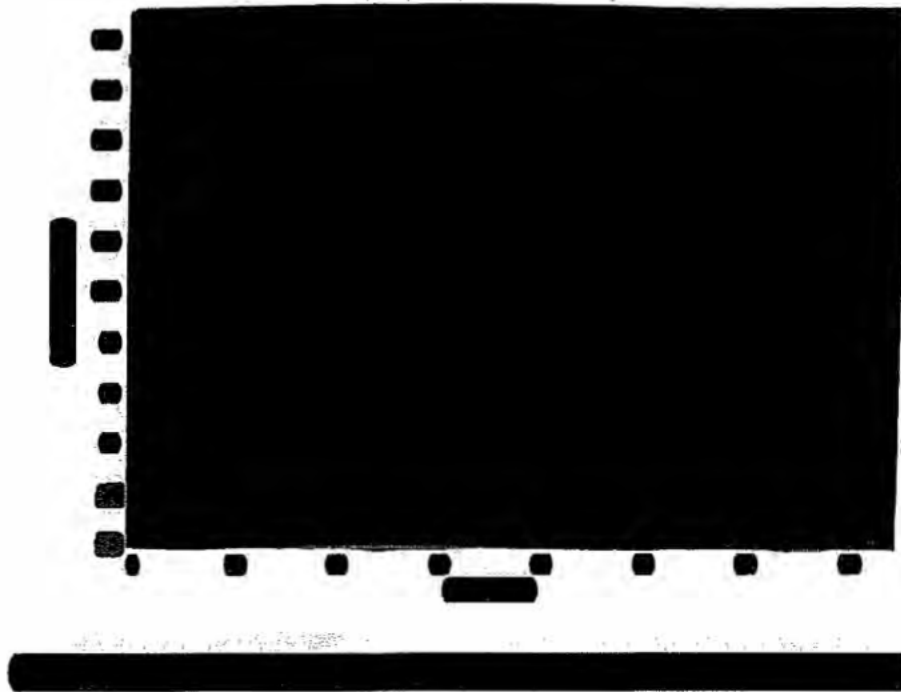
J.R. Simplot Company  
File Number 19-13-0079A

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that initial seepage rates at the time of closure will be on the order of 170 gallons per minute (gpm). Figure 32 is a graph of the predicted seepage rate from the phosphogypsum stack as a function of time after plant shutdown.

### 2.3.3 Process Water Evaporation

Considering an initial ponded area of [REDACTED] acres for ponds on top of the gypsum stack and a net evaporation rate of 31 inches per year, it is theoretically possible to evaporate [REDACTED] [REDACTED] provided that the ponds are kept fully ponded or fully surface wetted. Using water management techniques (recycling water collected in perimeter flow channels and the seepage collection drains back to the top of the stack to keep the uppermost compartments ponded and/or surface wet), all of the water that seeps from the stack and any remaining ponded water can be evaporated from the top gradient of the phosphogypsum stack. During the first 13 years after closure, the process water will be partially evaporated and some of the process water will seep back into the top of the stack where it will be retained by surface water tension in the phosphogypsum above the phreatic surface. After 13 years, water seeping from the stack will be neutralized using limestone to a pH of approximately 4 and then using lime to a pH of approximately 7. The treated water and sludge will be pumped back to lined ponds constructed on top of the stack where the treated water will be evaporated.



The conceptual water management plan during closure is to maximize evaporation rates from the gypsum stack top ponds by initially recycling collected seepage and free water back to the top of the stack in such a manner as to keep the surface area fully ponded or surface wet. Irrigation piping will be used as needed to distribute the water over the top gradient of the stack when the volume of water collected from stack seepage is no longer enough to pond the entire top surface.

During years 12 and 13, two of the existing top ponds will be lined to provide sufficient area (50 acres) to evaporate treated water and store lime residue from the treatment process. After year 13, process water evaporation from the remaining pond will cease and the remaining top ponds will be graded as needed for proper drainage, lined with the rule-specified 40-mil liner, and capped with a 2-foot thick protective soil cover. The final geometry of the top gradient is shown on Figure 12.

The water balance and drainage model used to develop this closure plan indicates that the irrigation area required to evaporate all the stack seepage will reduce over time [REDACTED]. To distribute the partially evaporated water as evenly as possible over the top surface of the stack, the irrigation area will [REDACTED] by reducing the time the irrigation system is operated each day. Seepage rates should be reduced sufficiently by Year 13 to allow all collected water to be adequately managed in the return water pond, without pumping any untreated water back to the top of the gypsum stack. The return water pump pond will need to remain in place for another 50 years or until all the seepage water can be contained prior to treatment in a surge tank.

As described earlier, a portion of the process water pumped to the gypsum stack surface will be permanently stored within the phosphogypsum stack field capacity. However, a small amount will reach the water table in the gypsum stack and increase the concentrations of the process water collected as seepage from the closed stack. A spreadsheet model was used to compute the rate of seepage from the stack with time to calculate the increase in concentration of the water that will be treated in the two-stage limestone/lime treatment facility. The following table presents the results of the analysis.

Location	Years	Volume Requiring Lime Treatment (acre-feet)	Relative Mass of Contaminants Requiring Treatment	Weighted Concentration Ratio
Pond 1	14-63	415	429	1.034
Ponds 2-5	14-63	1835	1848	1.007
Pond 6	14-63	315	331	1.051
Total		2565	2608	1.017
Pond 1	14-163	485	499	1.029
Ponds 2-5	14-163	2322	2336	1.006
Pond 6	14-163	392	408	1.041
Total		3199	3243	1.014

The concentration ratio used to compute the cost of limestone/lime for determining the unit treatment cost of \$16.68/1000 gallons was rounded up to 1.02.

#### 2.4 Key Elements of Closure Design

The Pocatello phosphogypsum stack system will be closed in general accordance with the requirements of Appendix 1.C. In general, the proposed closure will consist of providing a final cover over the entire surface of the gypsum stack and associated water flow channels and storage ponds that will meet the specified performance standards. In particular, the top gradient of the stack and associated ponds will be provided with a relatively impervious liner and protective cover that will be graded to promote drainage and minimize ponding of water on top of the lined surface. The side slopes of the stack will be provided with a final vegetated soil cover as needed to promote

rainfall runoff and evapotranspiration, while reducing infiltration and controlling erosion of the side slope cover. Conceptual details of the proposed closure are discussed below.

#### 2.4.1 Gypsum Stack Top Gradient and Capping

Appendix 1.C. requires, upon closure, that all phosphogypsum stacks be provided with a continuous, low permeability soil barrier or a relatively impervious geomembrane liner over the top gradient of the stack. If clay borrow materials are not locally available for a soil liner that meets the specified permeability criteria, an impervious geomembrane is typically used as the top liner.

For cost estimating purposes, the conceptual design of the final cover for the top of the Pocatello phosphogypsum stack utilizes the alternate cover design consisting of a synthetic geomembrane with a vegetated, 24-inch thick protective layer of clean soil obtained from locally available borrow sources. A typical cross section of the closed gypsum field and a design detail for the proposed synthetic liner and top cover is provided on Figures 29 and 30. 60-mil HDPE liner will be used for the lined lime sludge/evaporation pond, while 40-mil liner, with a 24-inch protective soil cover will be used for the remaining top ponds not utilized for treated water evaporation.

Figure 12 conceptually presents the anticipated final geometry and layout of the closed gypsum stack and the probable location of surface water control structures. In general, the top grading plan for the gypsum stack will provide positive gradients that will promote rainfall runoff and minimize water ponding on top of the lined surface. A perimeter dike will be provided around the top edge of the gypsum stack to prevent rainfall runoff from discharging down the side slopes of the stack in an uncontrolled manner. Rainfall runoff on top of the stack will, instead, be directed inboard to low points in each compartment, where decant spillways and piping systems will provide controlled release to, or beyond, the base of the stack. The locations of the decant spillways may differ from those shown, based on the actual stack geometry and location of the low points at the time the stack is deactivated.

#### 2.4.2 Gypsum Stack Side Slope Grading and Cover

Although the lower side slopes of the existing gypsum stack are typically flatter than 3.0 horizontal to 1.0 vertical, the slopes around the upper perimeter of the active storage compartments are steeper and will need to be flattened to no steeper than 3.0 horizontal to 1.0 vertical. The existing side slopes are presently stable; this stability will increase as the gypsum stack begins to drain, dewater, and settle after closure.

For cost estimating purposes, it is assumed that the final cover on the side slopes of the stack will consist of a 12-inch layer of soil that will support a drought-resistant vegetation cover to provide erosion control, increase evapotranspiration, reduce side slope infiltration and make the closed facility more aesthetically pleasing. Approximately 43 acres of the existing side slope area have already been reclaimed (covered with soil and grassed) and are not included in the final closure cost estimate presented herein.

#### 2.4.3 Surface Water Management

Surface water runoff from the top of the closed phosphogypsum stack will be directed inboard by perimeter dikes to low points for controlled release through decant spillways and piping systems to the base of the stack. Runoff from the lower portion of the side slope will flow directly downgradient to a lined toe swale at the base of the stack. The slope of the swale (i.e., along the

swale alignment) will generally be less than 0.2 percent. This is a relatively flat slope, which, for small rainfall events will result in relatively low flow velocities and correspondingly long retention periods. To minimize the infiltration of runoff collected from larger rainfall events on and routed along the benches, each swale will be provided with an impervious liner. For cost estimating purposes, it is anticipated that the runoff swales will be lined with a textured 60-mil HDPE liner, covered with a 24-inch thick protective soil cover, similar in design to that used for the gypsum stack top cover. Conceptual details of the proposed slope and toe ditch swales are illustrated on Figures 13 through 27.

Figure 12 presents the anticipated final geometry and conceptual surface water management plan of the gypsum stack after closure. As noted by the directional arrows shown on this figure, surface water runoff from the lined top areas of the gypsum stack after closure will be directed and detained as needed by water level control structures located near the southeast corner of Area 5 and the southwest corner of Area 3. Surface water runoff from the east side of the compartment will be discharged into a secondary lined detention pond that will provide controlled release of runoff from the closed facility top area to the unlined freshwater retention pond located downgradient near the northeast corner of the property. Runoff from the closed gypsum stack side slopes will be discharged into lined toe ditch swales and routed to the south and east side of the gypsum stack where it will be detained by water level control structure as necessary prior to discharge to the freshwater retention pond. It should be noted that since all surfaces of the closed facility will be covered by not less than 12 inches of vegetated soil cover, runoff quality should be suitable for offsite discharge to the retention pond with no additional treatment.

#### 2.4.4 Seepage/Leachate Control

Closure of the gypsum stack side slopes will require that portions of the existing side slopes be flattened and that additional seepage collection drains be provided at intervals on the slope and at the downstream toe of the gypsum to intercept process water seepage and route it back to the return water pump station for recycling to evaporation ponds located on top of the gypsum stack and eventually to the process water treatment plant. Based on the anticipated final stack geometry presented on Figure 12, it is estimated that seepage rates from the stack will initially be high, [REDACTED] but will further diminish significantly with time as the stack drains (See Figure 32). After final closure of the gypsum stack top ponds, seepage rates will diminish with time. The reduced seepage flow will be collected in the existing surge pond and return water pump station and will be periodically treated/neutralized with limestone and lime. The treated water and lime sludge solids will be evaporated and stored in designated lined storage ponds on top of the closed gypsum stack. The seepage rate treated/neutralized after Year 12 is plotted as a function of time after closure in Figure 33.

The return water pump station pond will not be closed immediately but will remain open after final closure of the gypsum stack is complete to collect and evaporate residual process water seepage collected after the gypsum stack is closed.

#### 2.4.5 Closure Techniques for Other Ponds

Two of the previously lined gypsum sedimentation ponds on top of the gypsum stack will ultimately be used for treated water evaporation and lime sludge storage. These ponds will eventually be closed by dewatering, drying and stabilization of the sedimented solids to the degree necessary to facilitate placement of a 1-foot thick, vegetated soil cover.

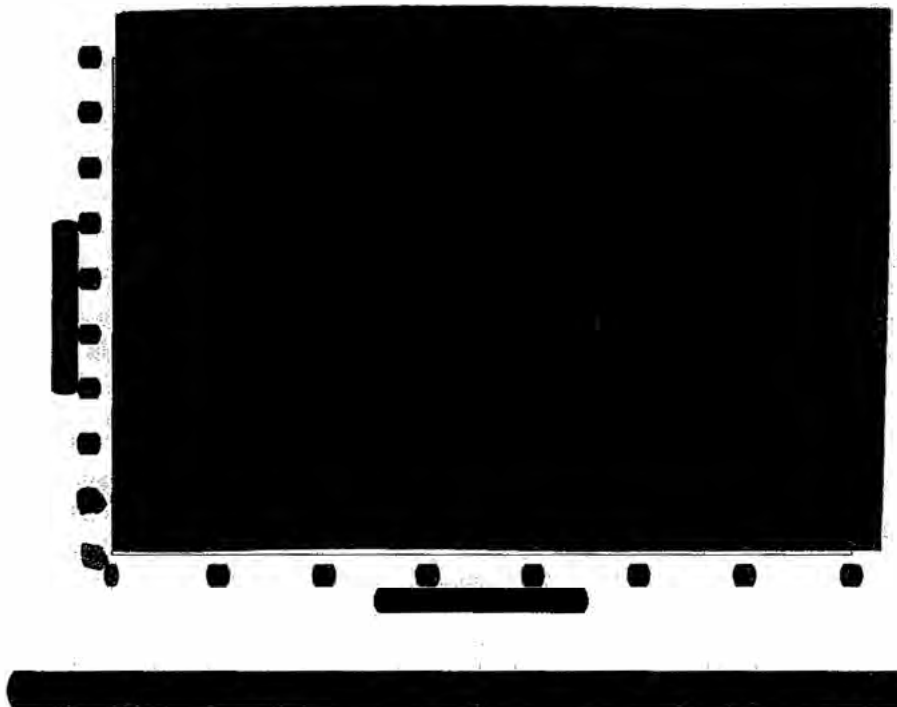
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2-9

The return water surge/pump pond will be used on a long term basis to collect and manage small quantities of process water seepage collected after final closure of the gypsum stack is complete. Closure of this pond will need to be delayed until seepage quantities are reduced to insignificant levels that can be managed by a smaller sump and pump station. Closure of the return water decant ponds will be accomplished by pushing down the side slopes and re-grading the surface of the pond in such a manner as to shed rainfall runoff/runon away from the original pond footprint. The regraded pond surface will be capped with a 40-mil HDPE liner and covered with a 2-foot protective cover of locally available soil borrow.

## 2.5 Phased Closure Construction Schedule

As discussed above, the proposed water management plan for this facility will rely on evaporation of excess process water instead of treatment and discharge. The closure schedule, therefore,



will be determined by the need to store and manage process water inventories during the closure period. The following is an approximate plan and schedule for how the phosphogypsum stack system will be closed in phases as expeditiously as practicable. The sequence of closure and closure schedule will most likely change based on the actual gypsum stack geometry and process water inventories at the time of the Don Plant Closure.

### Phase 1 - Closure Years 1 and 2

- Continue to pump process water collected in the surge pond and return water pump station back to the top of existing gypsum stack for water management and evaporation. Portions of the sedimentation ponds on top of the gypsum stack may need to be

reconfigured and regraded to some degree to increase wetted surface water areas to maximize evaporation rates and accommodate the irrigation system.

- It is assumed that a two-year idle period will be required for permitting and the preparation of detailed design plans and specifications and contract documents before any closure construction activities can commence. Initial closure activities will be limited to side slope areas that are not being used to store or evaporate excess process water.

#### Phase 2 - Closure Years 3 through 5

- Continue to pump process water collected in the surge pond and return water pump station back to the top of existing gypsum stack for water management and evaporation. Reconfigure top ponds as needed to increase wetted surface water areas to maximize evaporation rates.
- Construct earthen containment dike for surface water detention pond that will be located on natural ground at the northeast corner of the gypsum stack storage for management of runoff from closed portions of the gypsum stack side slopes.
- Final grade and close gypsum stack side slopes on the north side of the detention pond, the unlined gypsum side slopes on north and east sides of the lined lower compartment and the gypsum slopes north and west side of the Area 6 expansion area (Figure 8), which may include some of the following activities:
- Bench and install seepage collection drains on the side slopes of the gypsum stack at locations where designated on final closure design drawings.
- Install perimeter seepage collection toe drains at designated areas.
- Construct lined surface water swales and toe ditches as needed to route surface water runoff to detention pond.
- Once seepage has subsided, finish grade, amend and cover side slopes of gypsum stack with 12-inches of locally available soil and grass/vegetate slopes.

#### Phase 3 - (Years 6 through 8)

- Continue to pump process water collected in the surge pond and return water pump station back to the top of existing gypsum stack for water management and evaporation. Reconfigure top ponds as needed to increase wetted surface water areas to maximize evaporation rates.
- Final grade and close gypsum stack side slopes on the east, north and west sides of the lower compartment and the unlined gypsum side slopes on the north and west sides of the upper lined compartment (Figure 9), which may include some of the activities listed in the Phase 2 description.

Phase 4 - (Years 9 through 11)

- Continue to pump process water collected in the surge pond and return water pump station back to the top of existing gypsum stack for water management and evaporation. Reconfigure top ponds as needed to increase wetted surface water areas to maximize evaporation rates.
- Dewater Area 6 and the Lower compartment and allow the existing gypsum surfaces to dry sufficiently to facilitate site regrading in preparation for the installation of a 60-mil HDPE bottom. These two ponds will ultimately be used for lime sludge storage and evaporation of treated water, once process water treatment operations are implemented.
- Final grade and close gypsum stack side slopes on the east, north and west sides of the upper compartment (Figure 10), which may include some of the activities listed in the Phase 2 description.
- All remaining top ponds in the larger, uppermost pond will continue to be used on an as needed basis for process water irrigation and evaporation through year 13.
- It is anticipated that In Year 12, J.R. Simplot will begin construction of a double lime treatment plant that will be capable of treating all gypsum stack drainage water by Year 14. It is also anticipated that by the end of Year 13 all excess process water will have been evaporated and two of lowermost top ponds that will be lined and ready to receive treated water and lime sludge solids.
- 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 gypsum stack.
- Process water treatment will commence during year 13, which will require that the proposed process water treatment plant be installed and fully operational by that time.

Phase 5 - (Years 11 and 13)

- Continue to pump process water collected in the surge pond and return water pump station back to the top of existing gypsum stack for water management and evaporation.
- The water inventory on the remaining, uppermost top pond will diminish with time through the end of year 12 and into year 13. Allow the upper ponds to dewater surface dry to the degree possible to facilitate final closure of the pond surface after year 13.

Phase 6 - (Years 13 through 15)

- Continue to pump process water collected in the surge pond and return water pump station back to the top of existing gypsum stack for water management and evaporation. It is anticipated that the volume of water that will be pumped to the top of the stack for

evaporation will diminish with time and by the end of year 13 the uppermost pond will no longer be needed for water evaporation. Allow the exposed, upgradient sedimented gypsum deposits to surface dry in preparation for final grading and placement of the final cover materials.

- Physical closure of the Don Plant phosphogypsum stack system should be complete by the end of year 16, excluding final closure of the two lime treatment ponds and the decant ponds, which, by that time, should be collecting only entrained process water seepage that drains from the closed gypsum stack. A fifty-year long-term care and maintenance program for the closed facility will commence once final closure activities are complete and certified. A reduced long-term care period may be requested if Simplot can substantiate that the reduced period is sufficient to protect human health and the environment.

#### Phase 7 - (Years 16 through 50)

- The lined lime sludge storage and evaporation ponds on top of the closed 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.

Physical closure of the decant ponds will also be closed incrementally in a similar manner once seepage/drainage rates from the closed gypsum stack are reduced sufficiently to eliminate the need for temporary storage of that water for further treatment.



Section 3

CLOSURE LIABILITY

[REDACTED]

3.1 [REDACTED]

[REDACTED]

3.2 [REDACTED]

[REDACTED]

3.2.1 [REDACTED]

[REDACTED]

[REDACTED]

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File Number 19-13-0079A

3-2

3.2.2 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

3.3 [REDACTED]

[REDACTED]

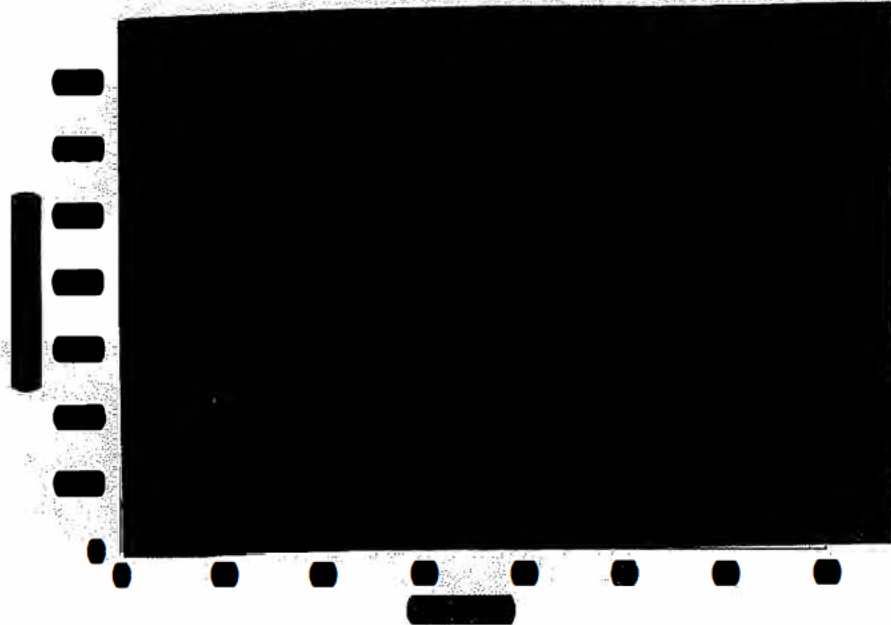
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[REDACTED]

[REDACTED]

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File Number 19-13-0079A

3-3



J.R. Simplot Company  
File Number 19-13-0079A

3-4

3.4.1 [REDACTED]

[REDACTED]

3.4.2 [REDACTED]

[REDACTED]

3.5 [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
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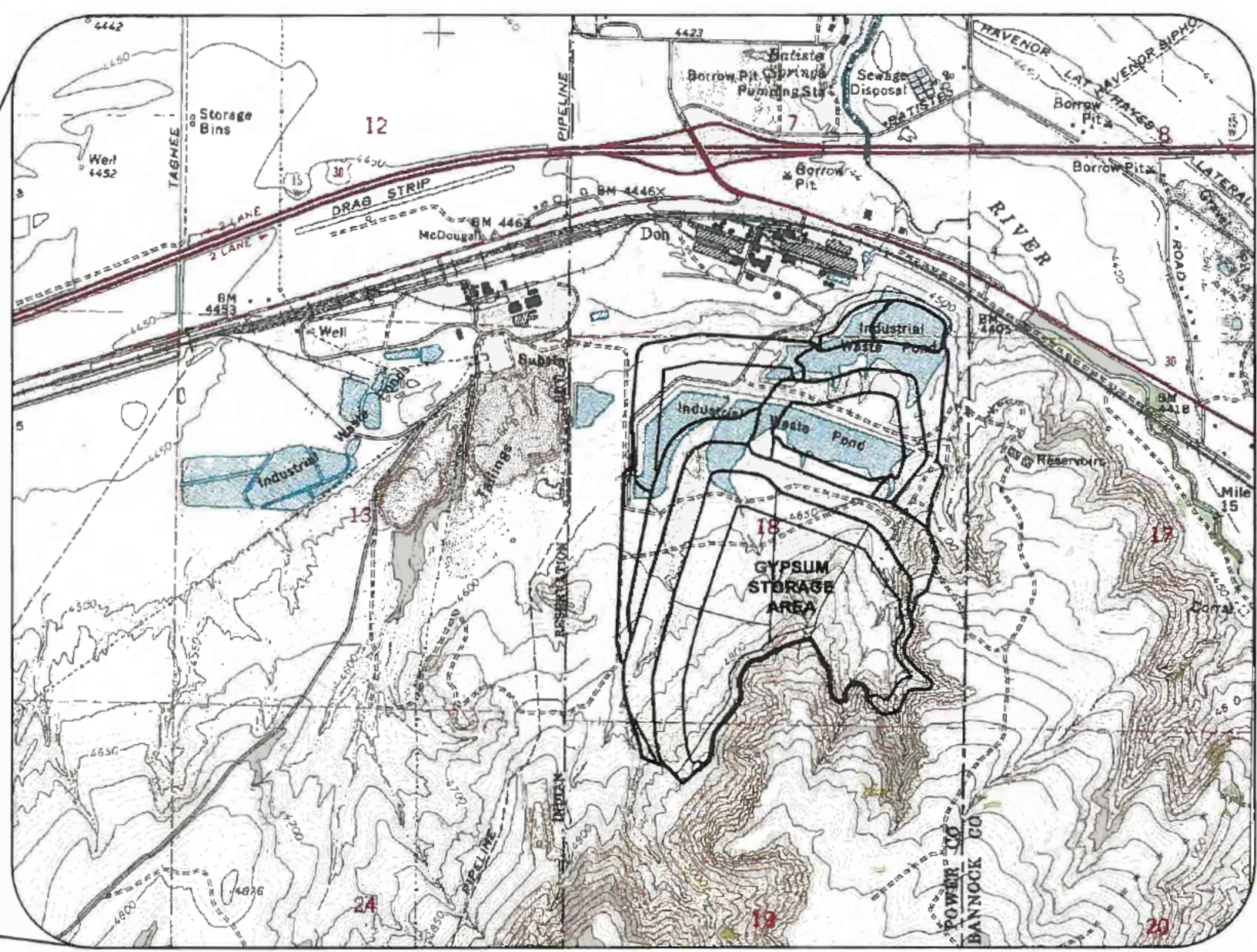
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File Number 19-13-0079A

3-5






**IDAHO STATE MAP**  
NOT TO SCALE



**SECTION 18  
TOWNSHIP 6 SOUTH  
RANGE 34 EAST**  
  
OBTAINED FROM USGS QUAD MAP:  
MICHAUD, IDAHO (PHOTOINSPECTED 1974)

**SITE VICINITY MAP**  
SCALE: 1" = 2000'

<b>SITE LOCATION MAP</b>		
 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants		
<b>J.R. SIMPLOT COMPANY</b> CLOSURE COST ESTIMATES POCATELLO, IDAHO		
DRAWN BY: SC	CHECKED BY: LVC	DATE: 07/17/20
FILE NO: 19-13-0079A	APPROVED BY:	FIGURE: 1



0 300 600  
SCALE: 1"=600'

AERIAL PHOTOGRAPH PROVIDED BY  
301 GEO TERRA MAPPING GROUP  
NOVEMBER 22, 2019

**LEGEND**

— ORIGINAL LINED  
- - - DIVIDER DIKES LOCATION

LINED  
DECANT POND  
(EAST CELL)

LINED  
DECANT POND  
(WEST CELL)

PLANT AREA

LINED LOWER  
COMPARTMENT  
(PHASE 1)

SOUTH LINED SLOPE  
OF LOWER COMPARTMENT  
(PHASE 7C)

LINED EAST SIDE OF  
UPPER EAST COMPARTMENT  
(PHASE 5)

LINED WEST SIDE OF  
UPPER EAST COMPARTMENT  
(PHASE 4)

LINED NORTH END OF  
UPPER WEST COMPARTMENT  
(PHASE 2)

LINED SOUTH PARTMENT OF  
UPPER WEST COMPARTMENT  
(PHASES 7A, 7B AND 7E)

LINED SOUTH END OF  
UPPER WEST COMPARTMENT  
(PHASE 3)

LINED LATERAL  
EXPANSION  
(PHASE 6)

**AERIAL PHOTOGRAPH OF  
EXISTING PHOSPHOGYPSUM  
STACK SYSTEM**

**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and  
Materials Consultants

**J.R. SIMPLOT COMPANY  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO**

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FILE NO: 19-13-0079A	APPROVED BY:	FIGURE: 2



0 300 600  
SCALE: 1"=600'

AERIAL PHOTOGRAPH PROVIDED BY  
3DI GEO TERRA MAPPING GROUP  
NOVEMBER 22, 2019

**LEGEND**

--- ORIGINAL LINED DIVIDER DIKES LOCATION

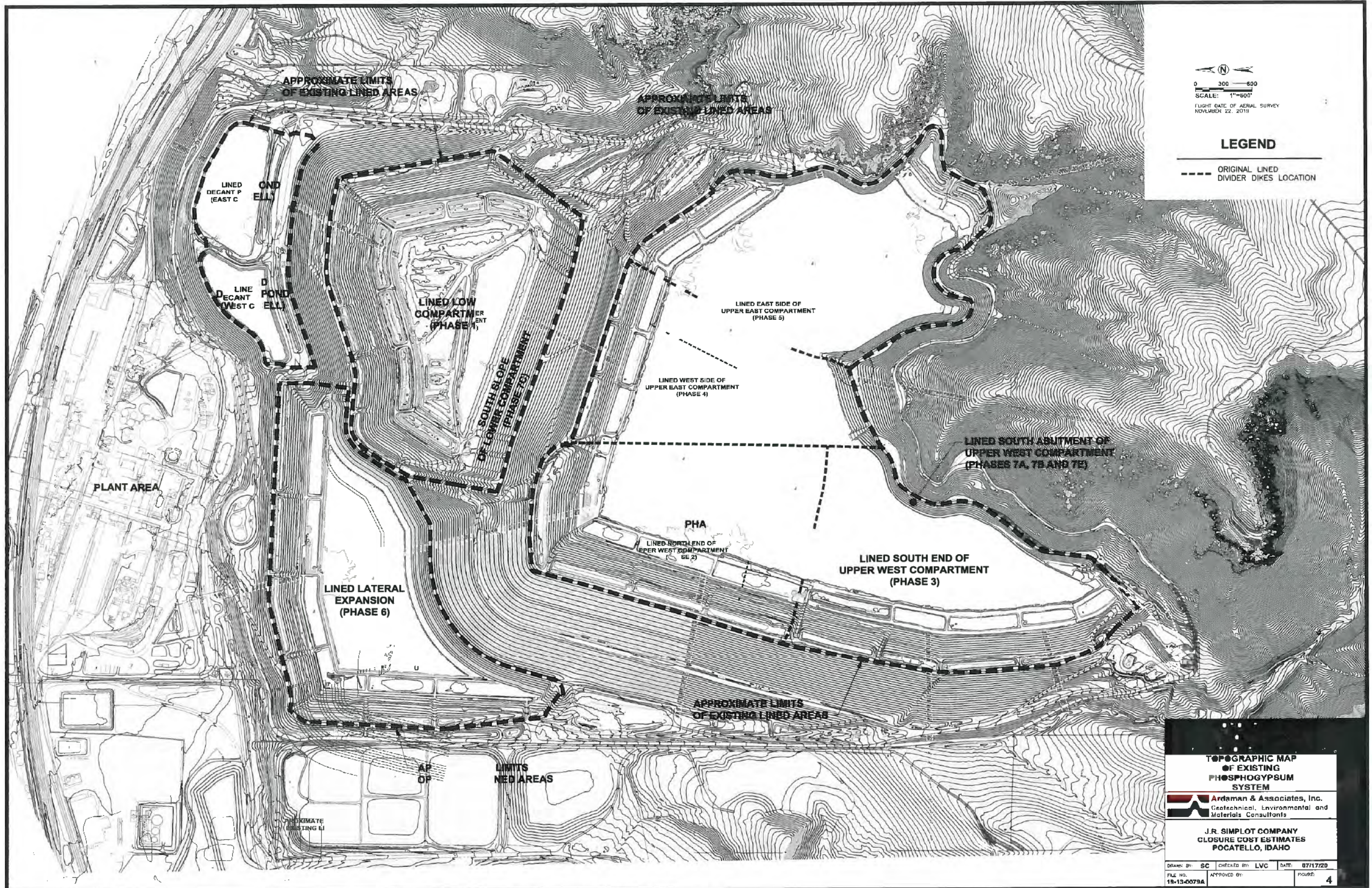
**APPROXIMATE LIMITS OF EXISTING LINED AREAS**

**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and  
Materials Consultants

**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO

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FILE NO: 19-13-0079A APPROVED BY: FOURIF





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 SCALE: 1"=600'  
 FLIGHT DATE OF AERIAL SURVEY  
 NOVEMBER 22, 2018

**LEGEND**

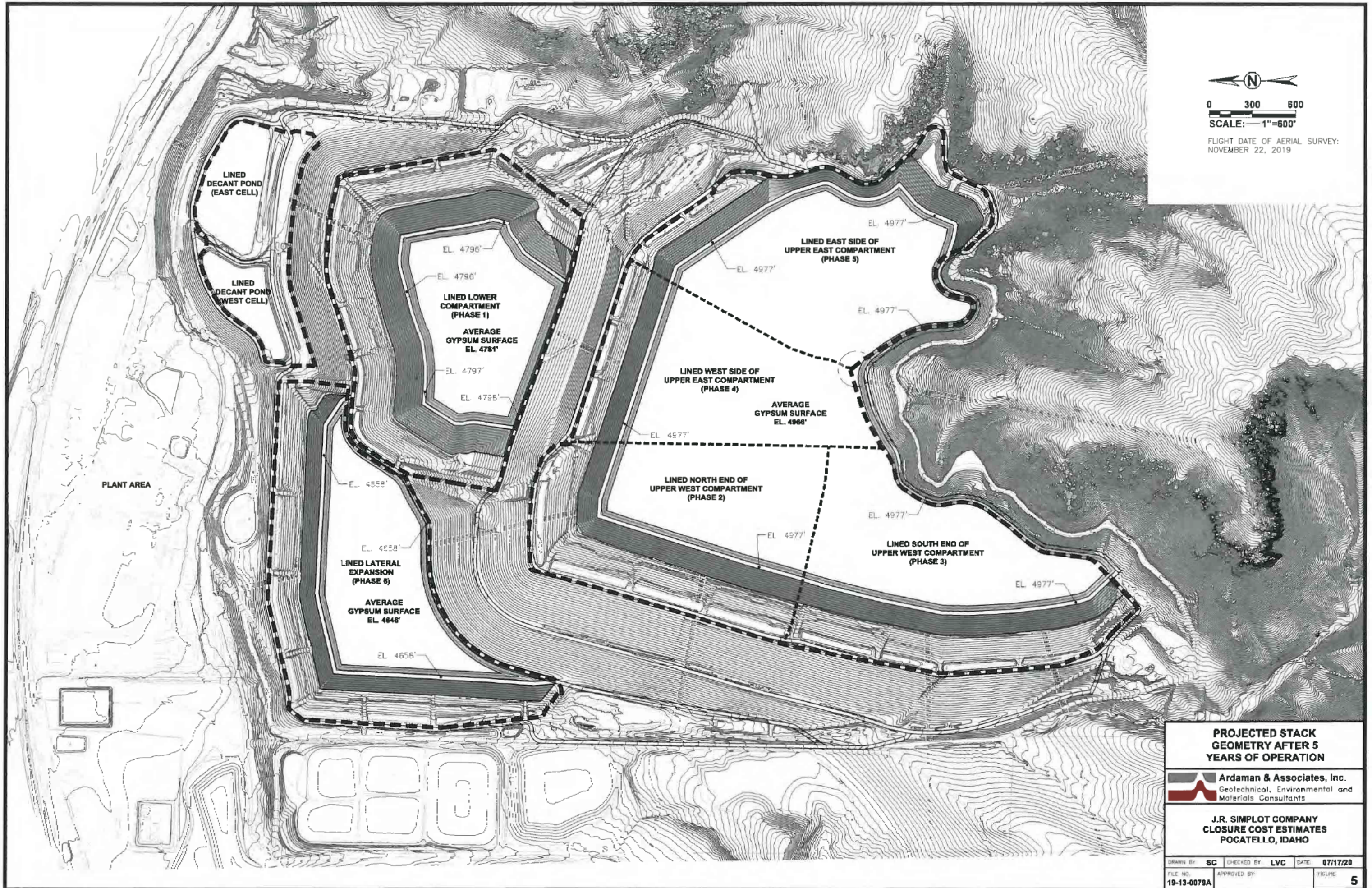
--- ORIGINAL LINED DIVIDER DIKES LOCATION

**TOPOGRAPHIC MAP  
 OF EXISTING  
 PHOSPHOGYPSUM  
 SYSTEM**

**Ardaman & Associates, Inc.**  
 Geotechnical, Environmental and  
 Materials Consultants

**J.R. SIMPLOT COMPANY  
 CLOSURE COST ESTIMATES  
 POCA TELLO, IDAHO**

DRAWN BY: SC CHECKED BY: LVC DATE: 07/17/20  
 FILE NO. 18-13-0079A APPROVED BY: FIGURE: 4



0 300 600  
SCALE: 1"=600'

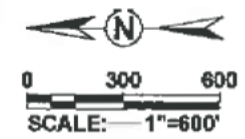
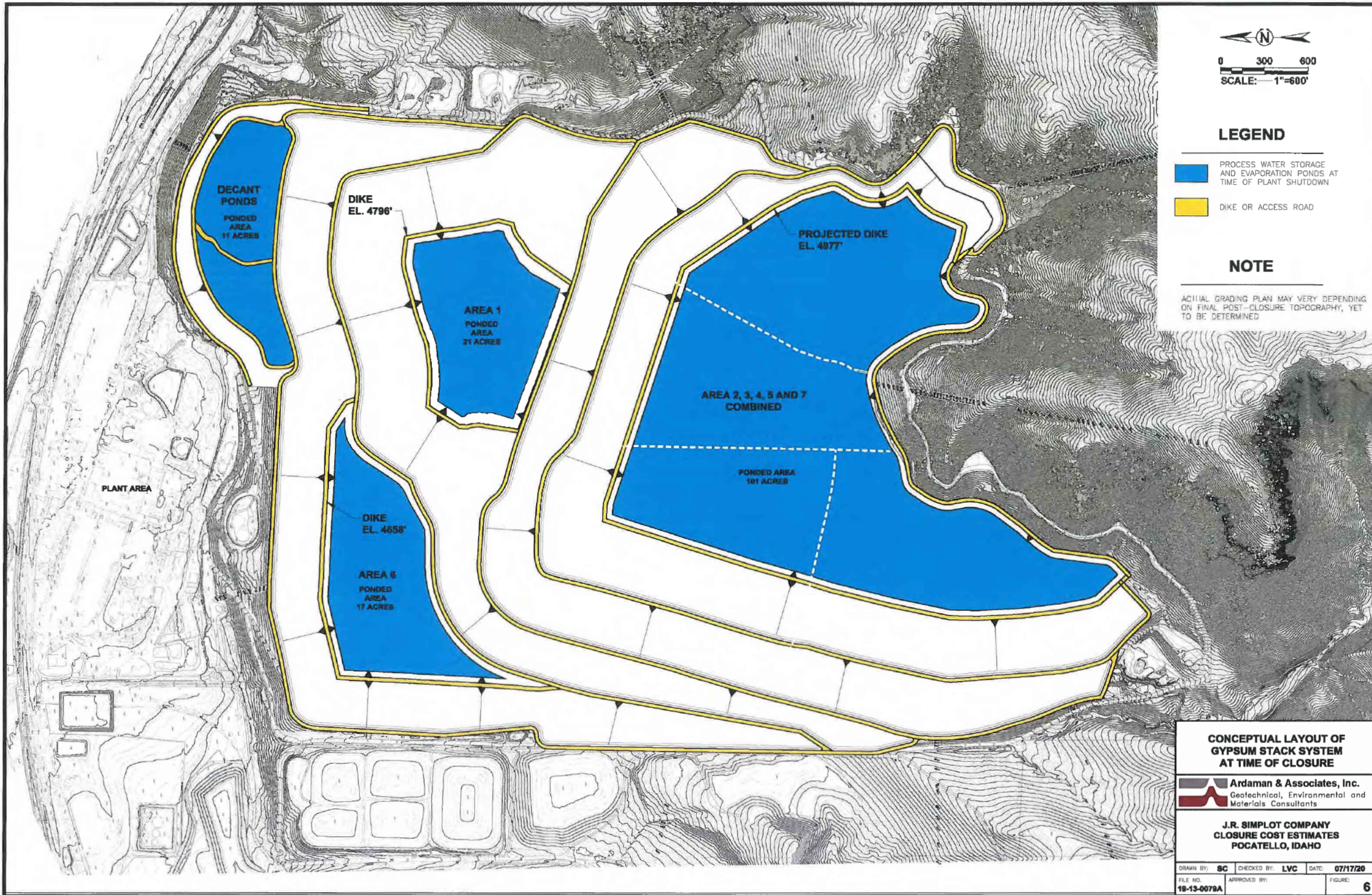
FLIGHT DATE OF AERIAL SURVEY:  
NOVEMBER 22, 2019

**PROJECTED STACK  
GEOMETRY AFTER 5  
YEARS OF OPERATION**

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Geotechnical, Environmental and  
Materials Consultants

**J.R. SIMPLOT COMPANY  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO**

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FILE NO: 19-13-0079A	APPROVED BY:	FIGURE: 5



**LEGEND**

- PROCESS WATER STORAGE AND EVAPORATION PONDS AT TIME OF PLANT SHUTDOWN
- DIKE OR ACCESS ROAD

**NOTE**

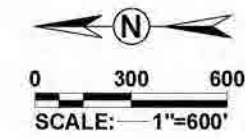
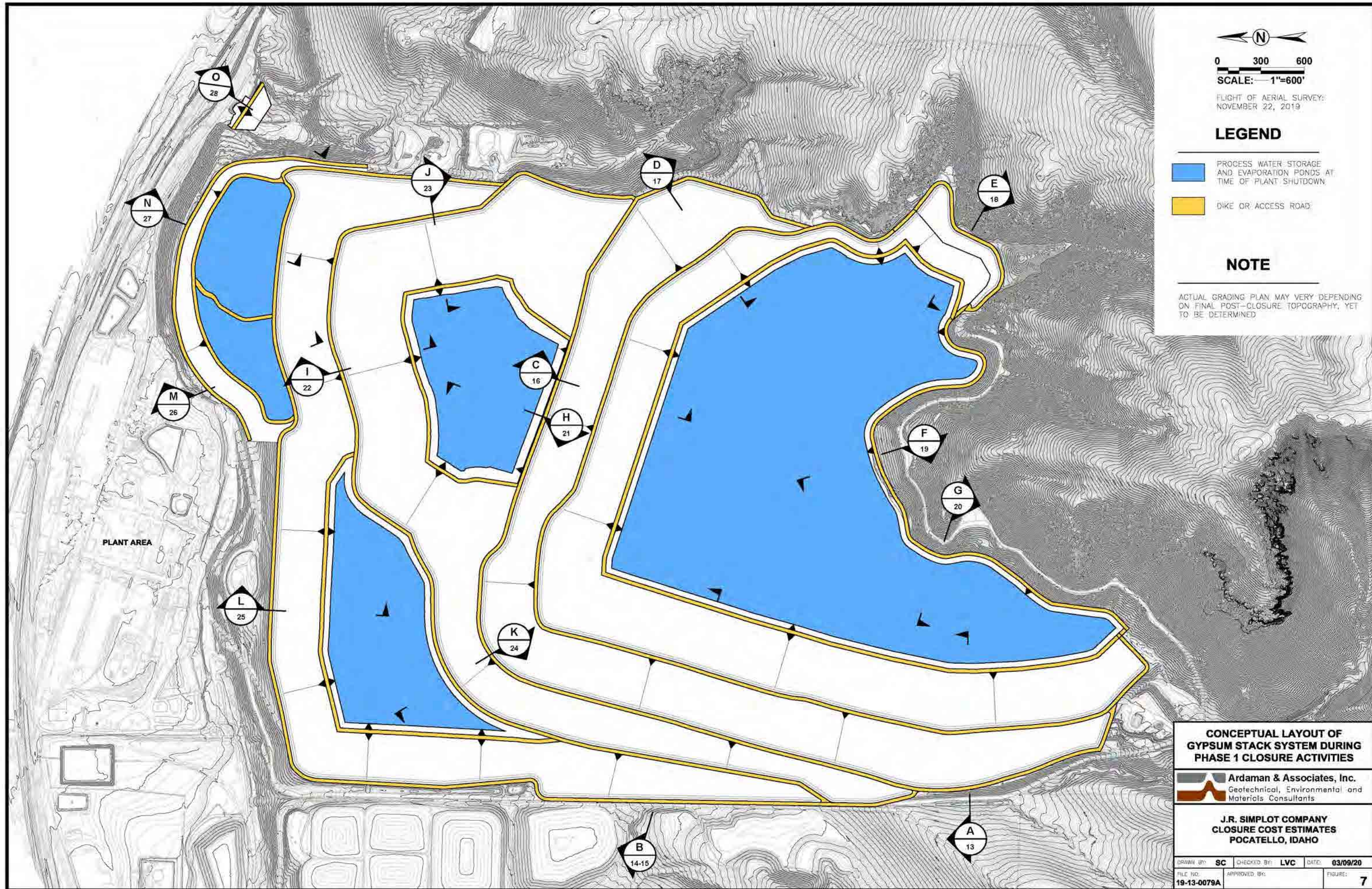
ACTUAL GRADING PLAN MAY VARY DEPENDING ON FINAL POST-CLOSURE TOPOGRAPHY, YET TO BE DETERMINED

**CONCEPTUAL LAYOUT OF GYPSUM STACK SYSTEM AT TIME OF CLOSURE**

**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and Materials Consultants

**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO

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FILE NO. <b>18-13-0079A</b>	APPROVED BY:	FIGURE: <b>6</b>



FLIGHT OF AERIAL SURVEY:  
NOVEMBER 22, 2019

**LEGEND**

- PROCESS WATER STORAGE AND EVAPORATION PONDS AT TIME OF PLANT SHUTDOWN
- DIKE OR ACCESS ROAD

**NOTE**

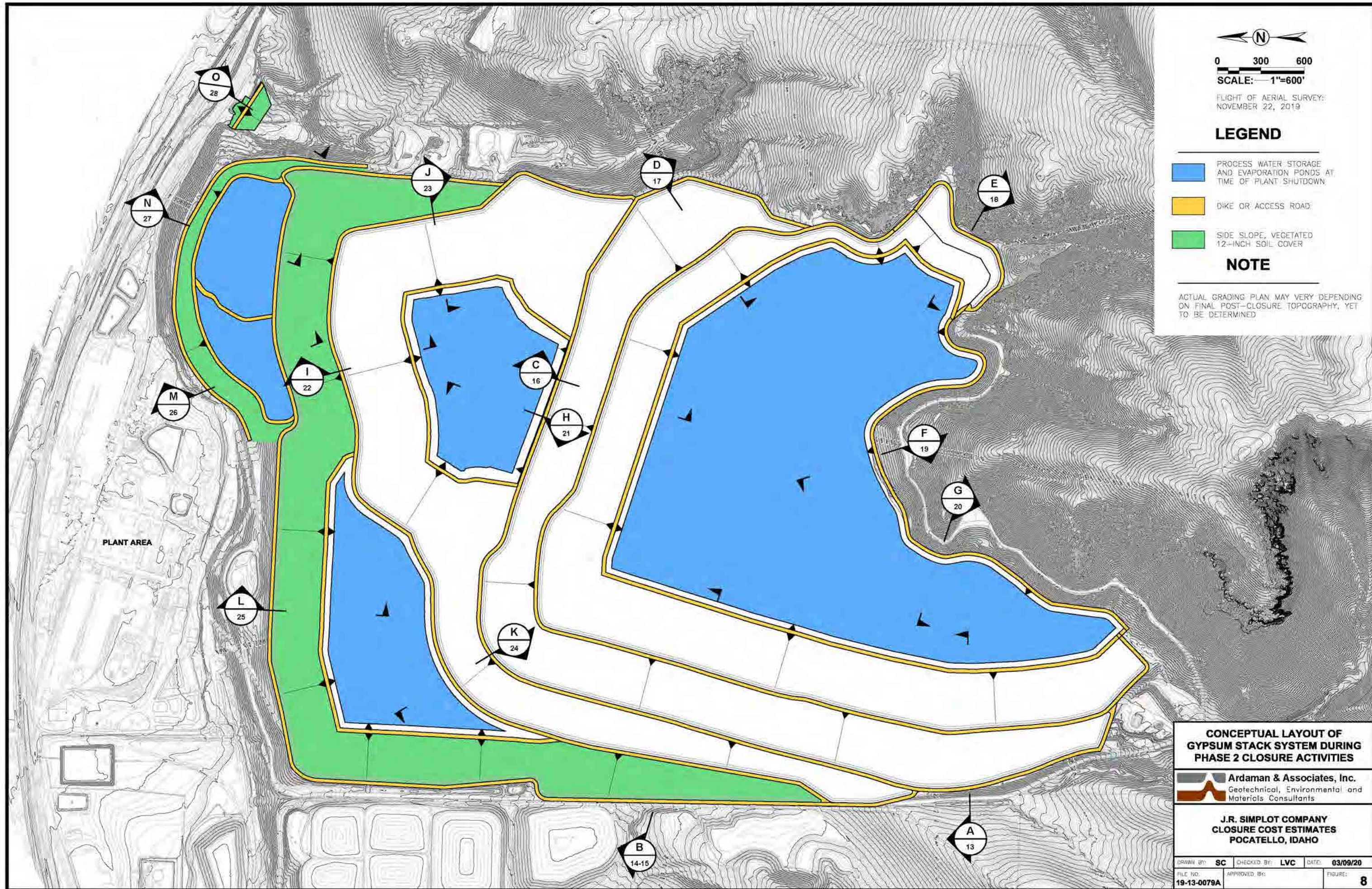
ACTUAL GRADING PLAN MAY VARY DEPENDING ON FINAL POST-CLOSURE TOPOGRAPHY, YET TO BE DETERMINED

**CONCEPTUAL LAYOUT OF GYPSUM STACK SYSTEM DURING PHASE 1 CLOSURE ACTIVITIES**

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**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO

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0 300 600  
 SCALE: 1"=600'

FLIGHT OF AERIAL SURVEY:  
 NOVEMBER 22, 2019

**LEGEND**

- PROCESS WATER STORAGE AND EVAPORATION PONDS AT TIME OF PLANT SHUTDOWN
- DIKE OR ACCESS ROAD
- SIDE SLOPE, VEGETATED 12-INCH SOIL COVER

**NOTE**

ACTUAL GRADING PLAN MAY VARY DEPENDING ON FINAL POST-CLOSURE TOPOGRAPHY, YET TO BE DETERMINED

PLANT AREA

**CONCEPTUAL LAYOUT OF GYPSUM STACK SYSTEM DURING PHASE 2 CLOSURE ACTIVITIES**

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 CLOSURE COST ESTIMATES  
 POCATELLO, IDAHO

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FILE NO. 19-13-0079A	APPROVED BY:	FIGURE: 8



0 300 600  
 SCALE: 1"=600'

FLIGHT OF AERIAL SURVEY:  
 NOVEMBER 22, 2019

**LEGEND**

- PROCESS WATER STORAGE AND EVAPORATION PONDS AT TIME OF PLANT SHUTDOWN
- DIKE OR ACCESS ROAD
- SIDE SLOPE, VEGETATED 12-INCH SOIL COVER

**NOTE**

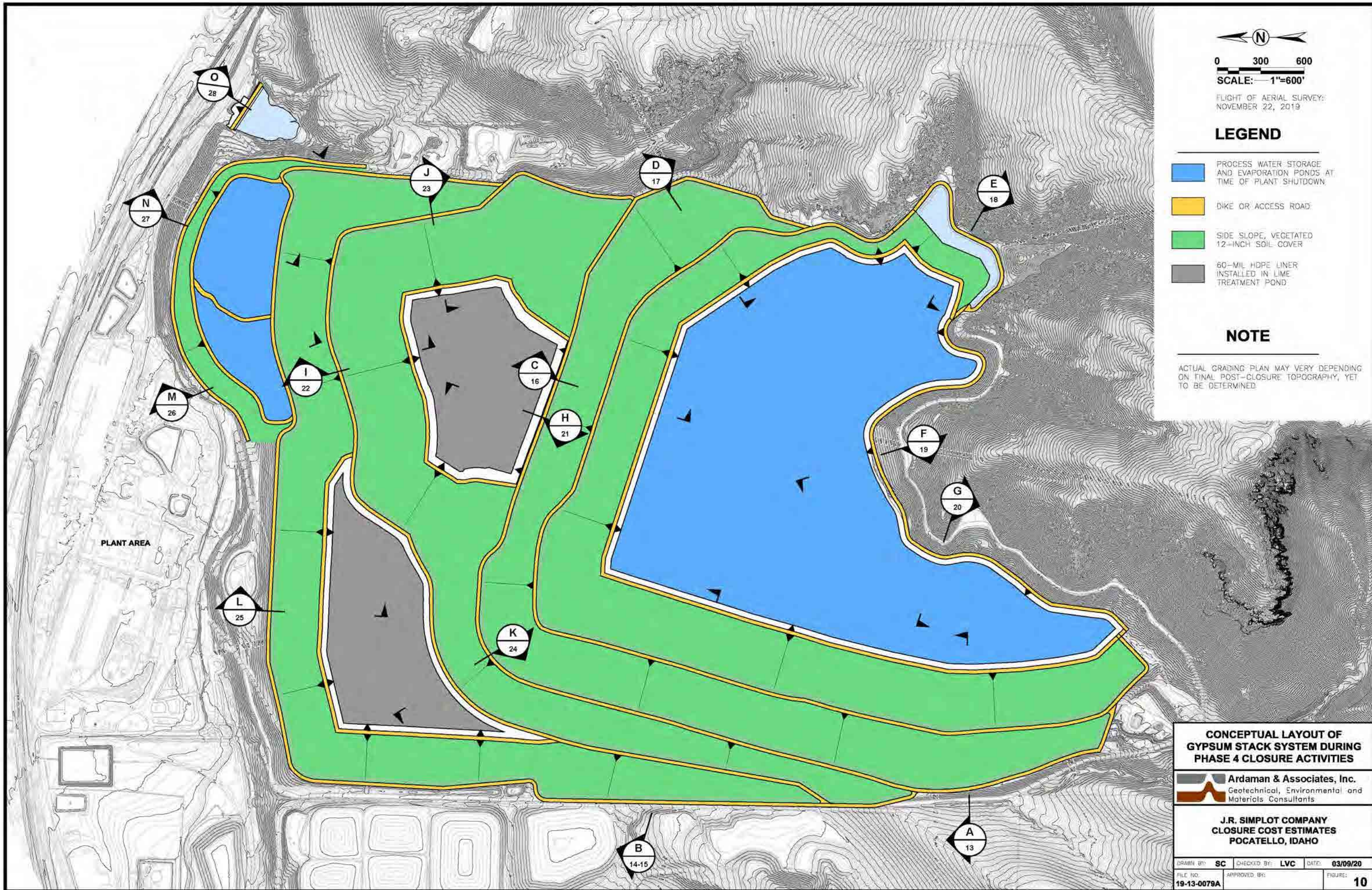
ACTUAL GRADING PLAN MAY VARY DEPENDING ON FINAL POST-CLOSURE TOPOGRAPHY, YET TO BE DETERMINED

**CONCEPTUAL LAYOUT OF GYPSUM STACK SYSTEM DURING PHASE 3 CLOSURE ACTIVITIES**

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 CLOSURE COST ESTIMATES  
 POCATELLO, IDAHO

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FILE NO: 19-13-0079A	APPROVED BY:	FIGURE: 9



0 300 600  
 SCALE: 1"=600'

FLIGHT OF AERIAL SURVEY:  
 NOVEMBER 22, 2019

**LEGEND**

- PROCESS WATER STORAGE AND EVAPORATION PONDS AT TIME OF PLANT SHUTDOWN
- DIKE OR ACCESS ROAD
- SIDE SLOPE, VEGETATED 12-INCH SOIL COVER
- 60-MIL HDPE LINER INSTALLED IN LIME TREATMENT POND

**NOTE**

ACTUAL GRADING PLAN MAY VARY DEPENDING ON FINAL POST-CLOSURE TOPOGRAPHY, YET TO BE DETERMINED


**CONCEPTUAL LAYOUT OF GYPSUM STACK SYSTEM DURING PHASE 4 CLOSURE ACTIVITIES**

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**J.R. SIMPLOT COMPANY**  
 CLOSURE COST ESTIMATES  
 POCATELLO, IDAHO

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 0 300 600  
 SCALE: 1"=600'  
 F.L. & H.T. OF AERIAL SURVEY:  
 NOVEMBER 22, 2019

**LEGEND**


-  PROCESS WATER STORAGE AND EVAPORATION POND AT TIME OF "PLAN" SHUTDOWN
-  DIKE OR ACCESS ROAD
-  SIDE SLOPE, VEGETATED 12-INCH SO<sub>2</sub> COVER
-  LIME SLUDGE SETTLING POND
-  ALLOW UPPER PONDS TO DEWATER AND SURFACE DRY

**NOTE**

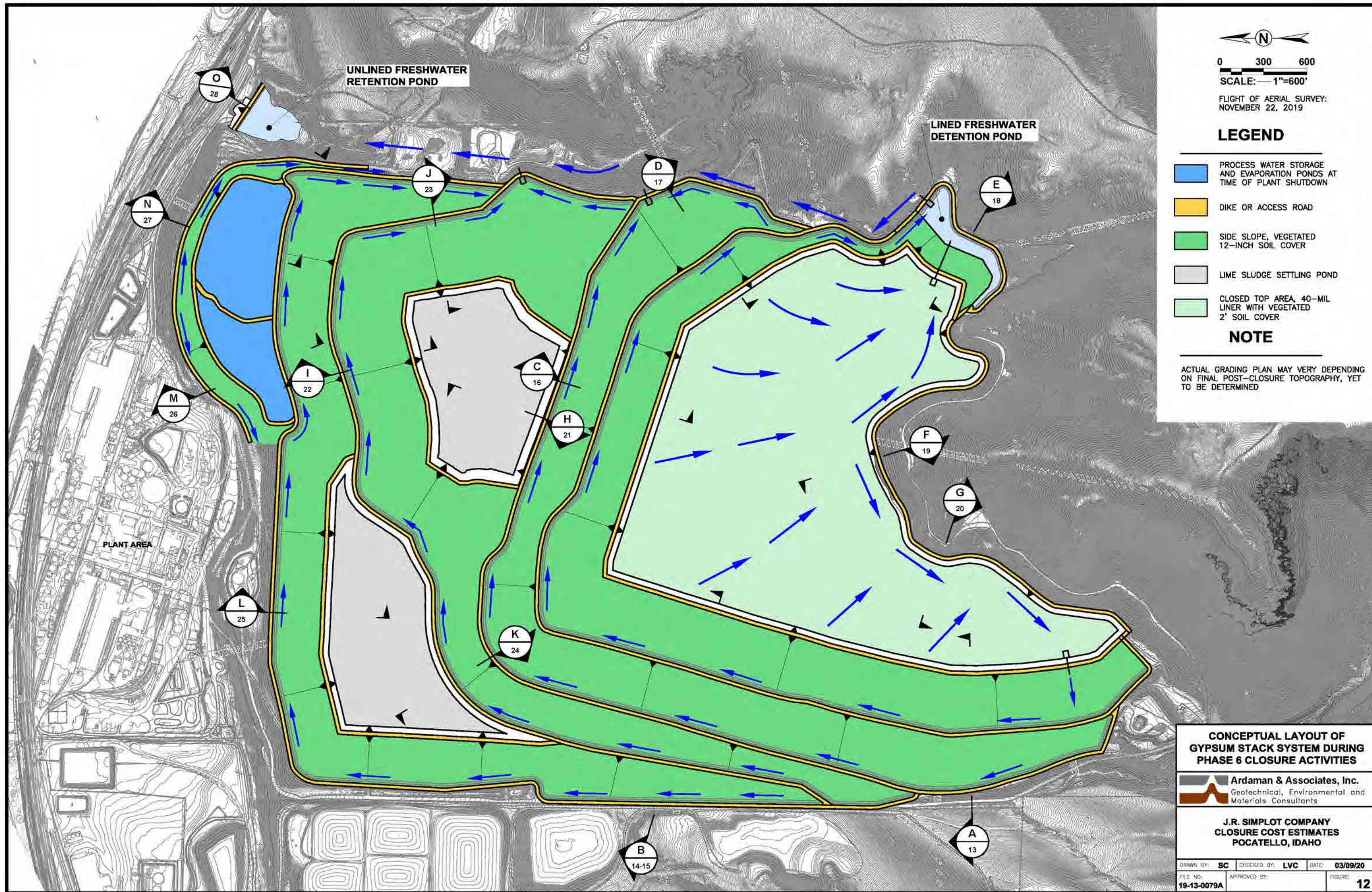
ACTUAL GRADING PLAN MAY VARY DEPENDING ON FINAL POST-CLOSURE TOPOGRAPHY, YET TO BE DETERMINED

PLANT AREA

CONCEPTUAL LAYOUT OF GYPSUM STACK SYSTEM DURING PHASE 5 CLOSURE ACTIVITIES


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0 300 600  
 SCALE: 1"=600'  
 FLIGHT OF AERIAL SURVEY:  
 NOVEMBER 22, 2019

**LEGEND**

- PROCESS WATER STORAGE AND EVAPORATION PONDS AT TIME OF PLANT SHUTDOWN
- DIKE OR ACCESS ROAD
- SIDE SLOPE, VEGETATED 12-INCH SOIL COVER
- LIME SLUDGE SETTLING POND
- CLOSED TOP AREA, 40-MIL LINER WITH VEGETATED 2' SOIL COVER

**NOTE**

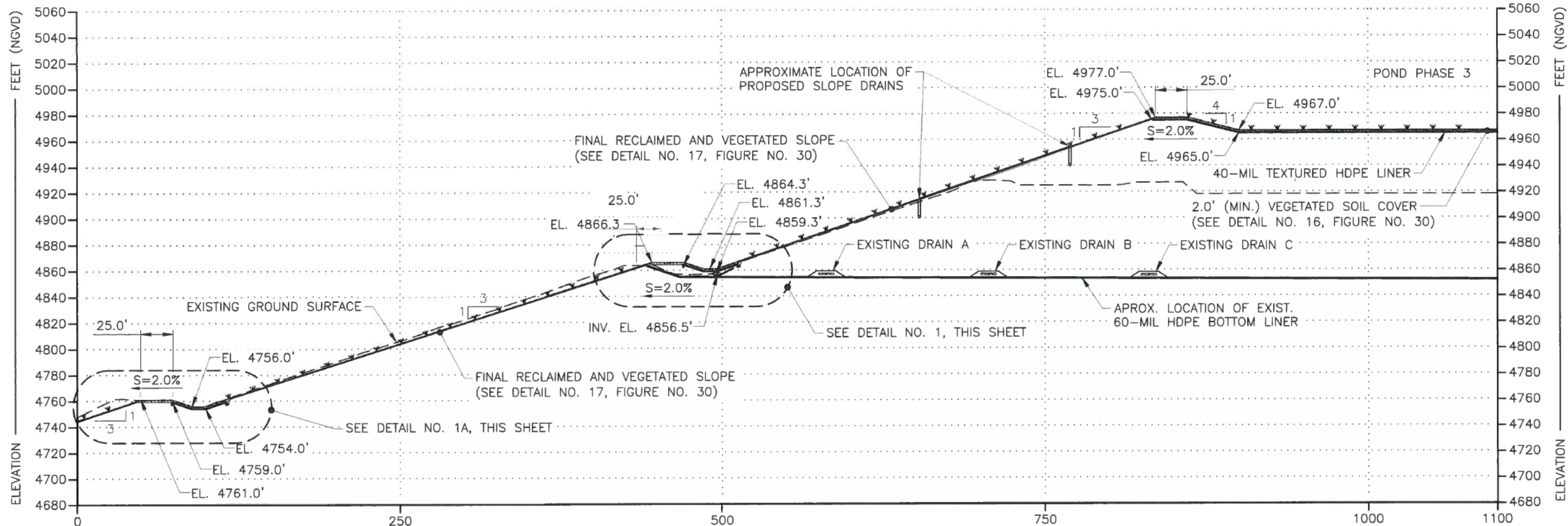
ACTUAL GRADING PLAN MAY VARY DEPENDING ON FINAL POST-CLOSURE TOPOGRAPHY, YET TO BE DETERMINED

**CONCEPTUAL LAYOUT OF GYPSUM STACK SYSTEM DURING PHASE 6 CLOSURE ACTIVITIES**

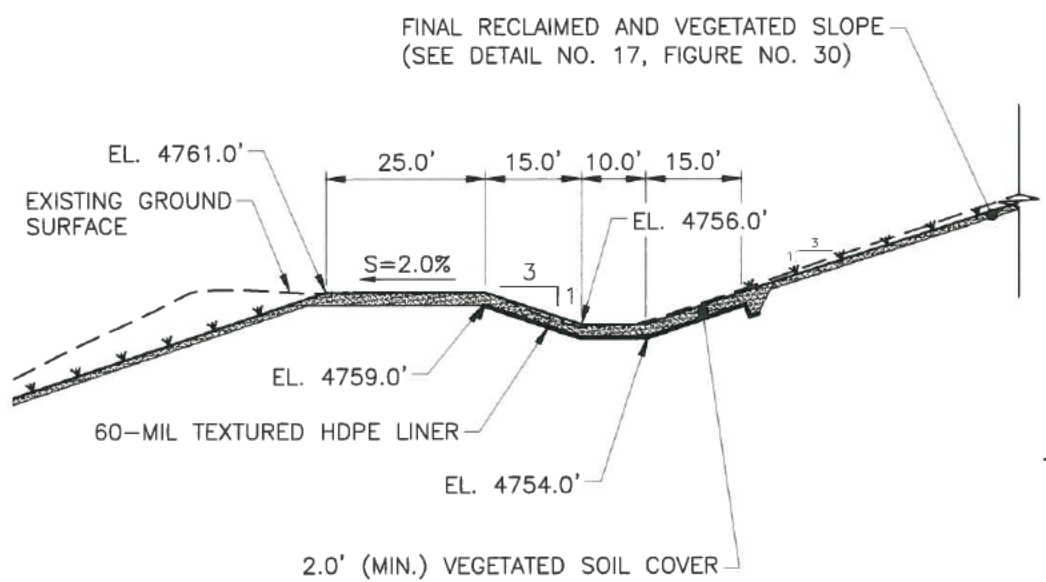
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**J.R. SIMPLOT COMPANY  
 CLOSURE COST ESTIMATES  
 POCA TELLO, IDAHO**

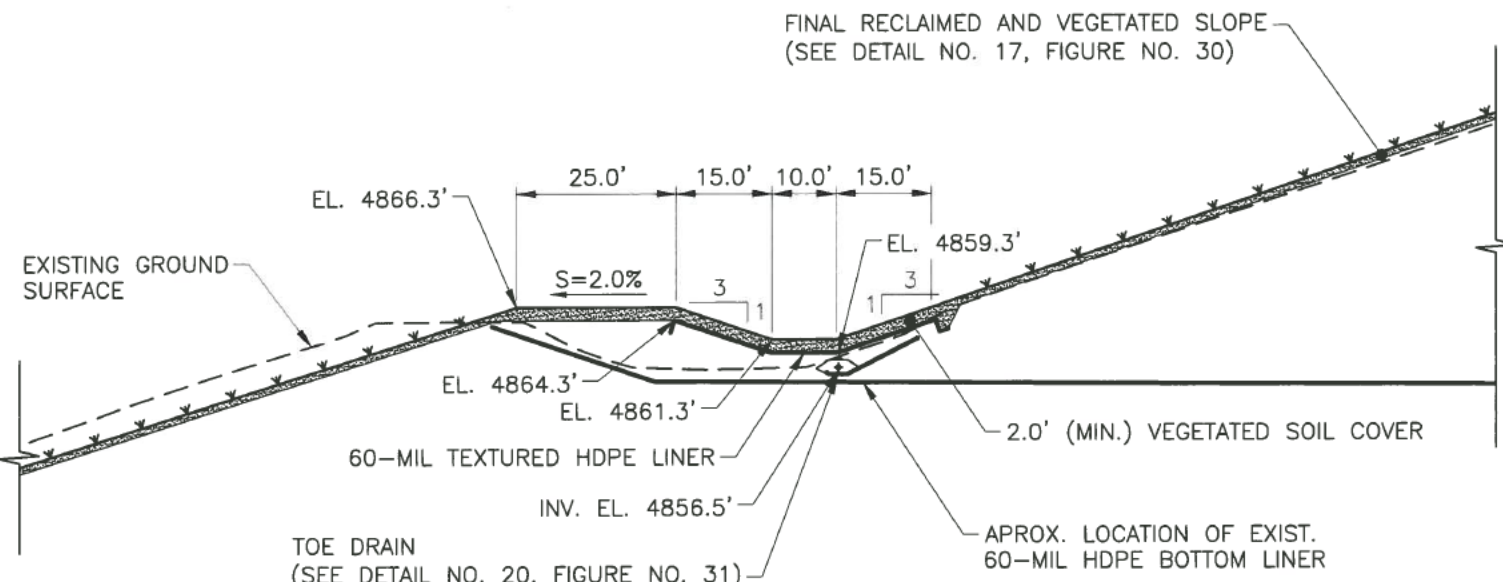
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FILE NO: 19-13-0079A	APPROVED BY:	FIGURE: 12



**A CROSS SECTION**  
SCALE: 1" = 80'



**1A TOE DITCH DETAIL CROSS SECTION A**  
SCALE: 1" = 30'



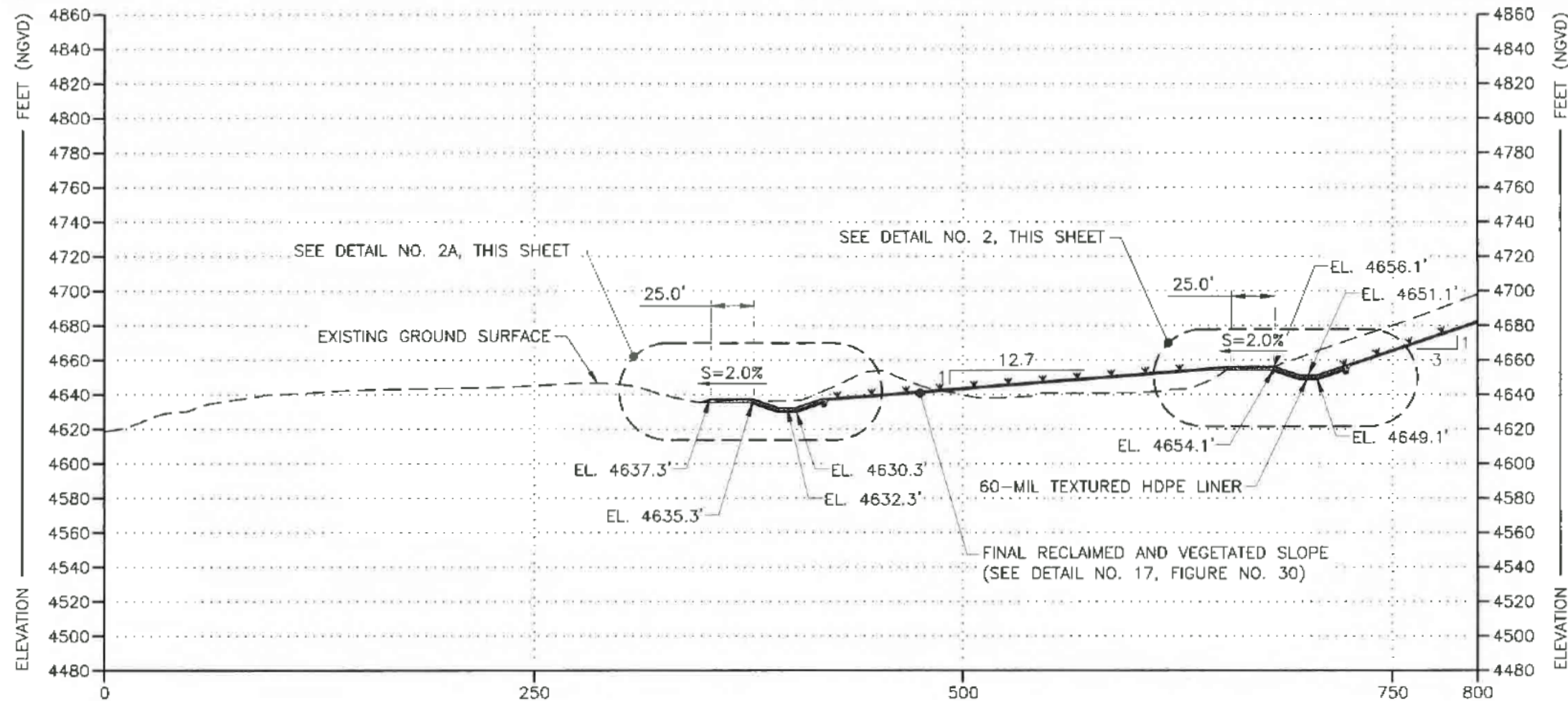
**1 DETAIL CROSS SECTION A**  
SCALE: 1" = 30'

**CROSS SECTION A**

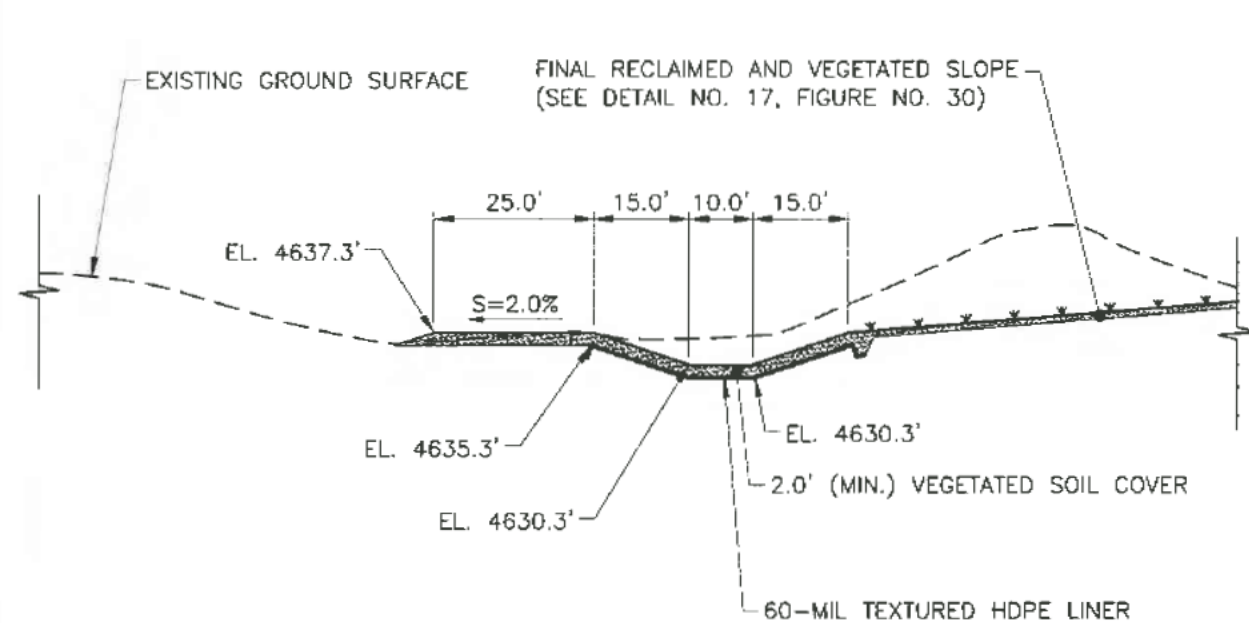
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CLOSURE COST ESTIMATES  
POCATELLO, IDAHO

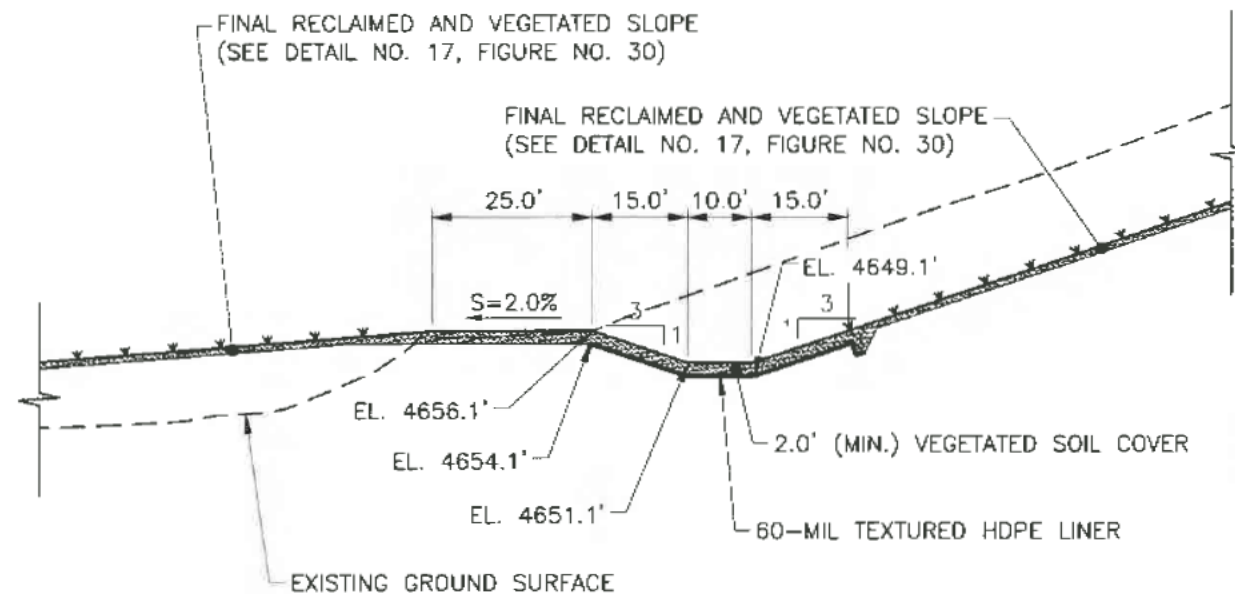
DRAWN BY: <b>LG</b>	CHECKED BY: <b>LVC</b>	DATE: <b>03/09/20</b>
FILE NO: <b>19-13-0079A</b>	APPROVED BY:	FIGURE: <b>13</b>




**B** CROSS SECTION STA. 0+00 THROUGH STA. 8+00  
SCALE: 1" = 80'

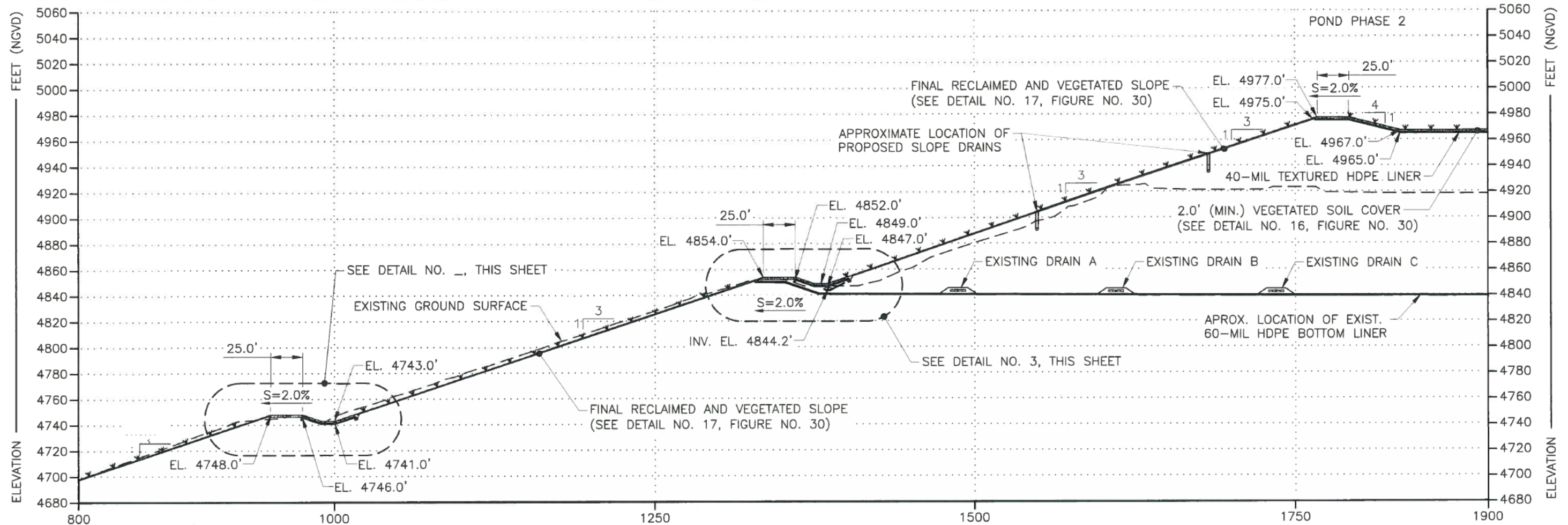


**2A** TOE DITCH DETAIL CROSS SECTION B  
SCALE: 1" = 30'

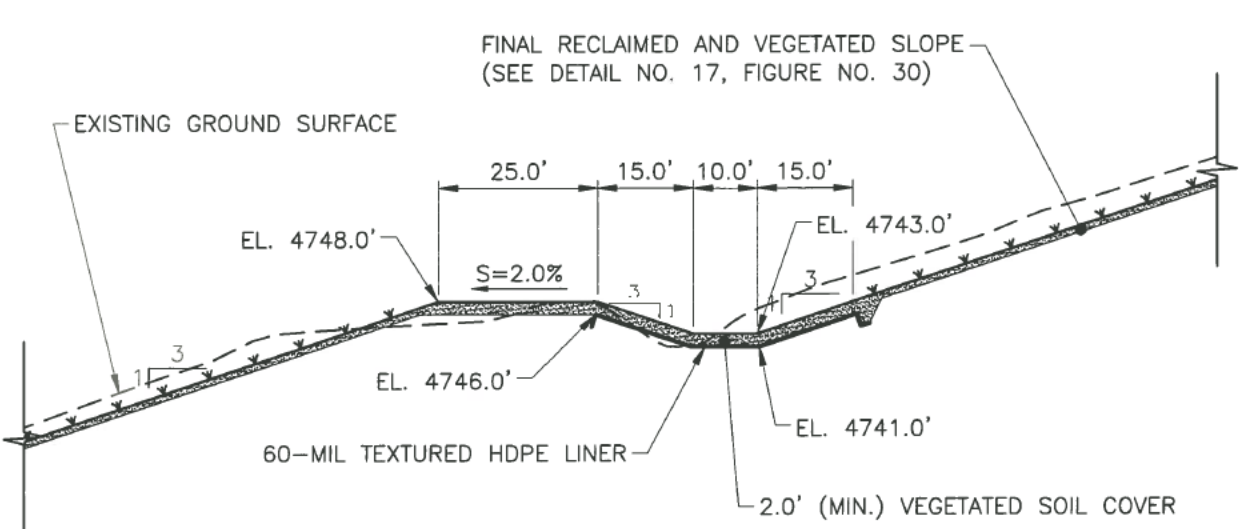


**2** DETAIL CROSS SECTION B  
SCALE: 1" = 30'

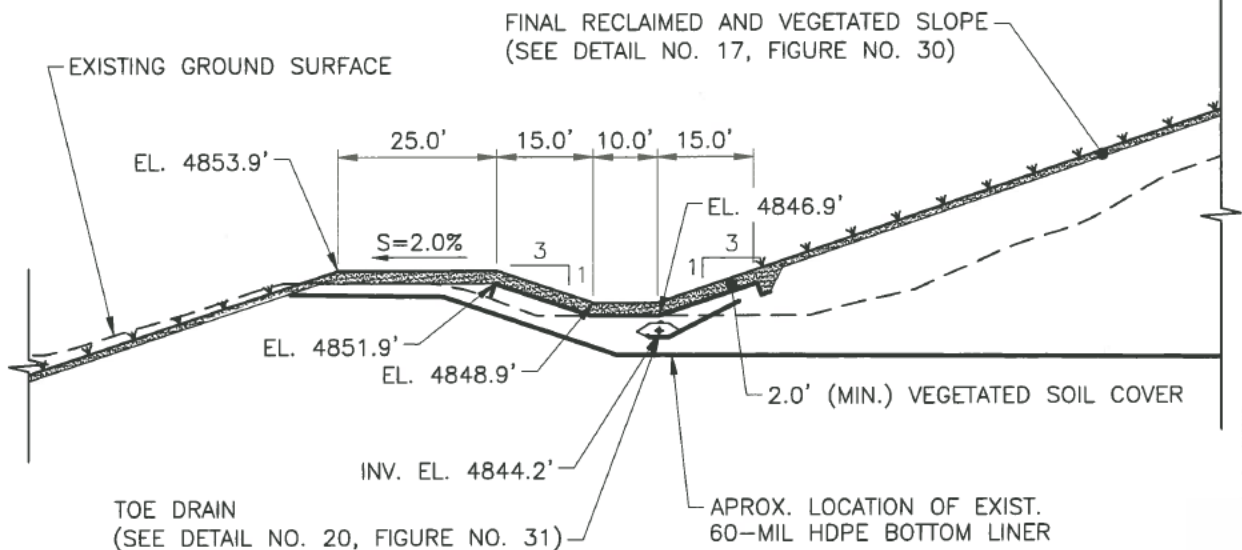
<b>CROSS SECTION B</b>		
 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants		
<b>J.R. SIMPLOT COMPANY</b> CLOSURE COST ESTIMATES POCA TELLO, IDAHO		
DRAWN BY: SC	CHECKED BY: LVC	DATE: 03/09/20
FILE NO: 19-13-0079A	APPROVED BY:	FIGURE: 14



**B CROSS SECTION STA. 8+00 THROUGH STA. 19+50**  
SCALE: 1" = 80'



**3A TOE DITCH DETAIL CROSS SECTION B**  
SCALE: 1" = 30'



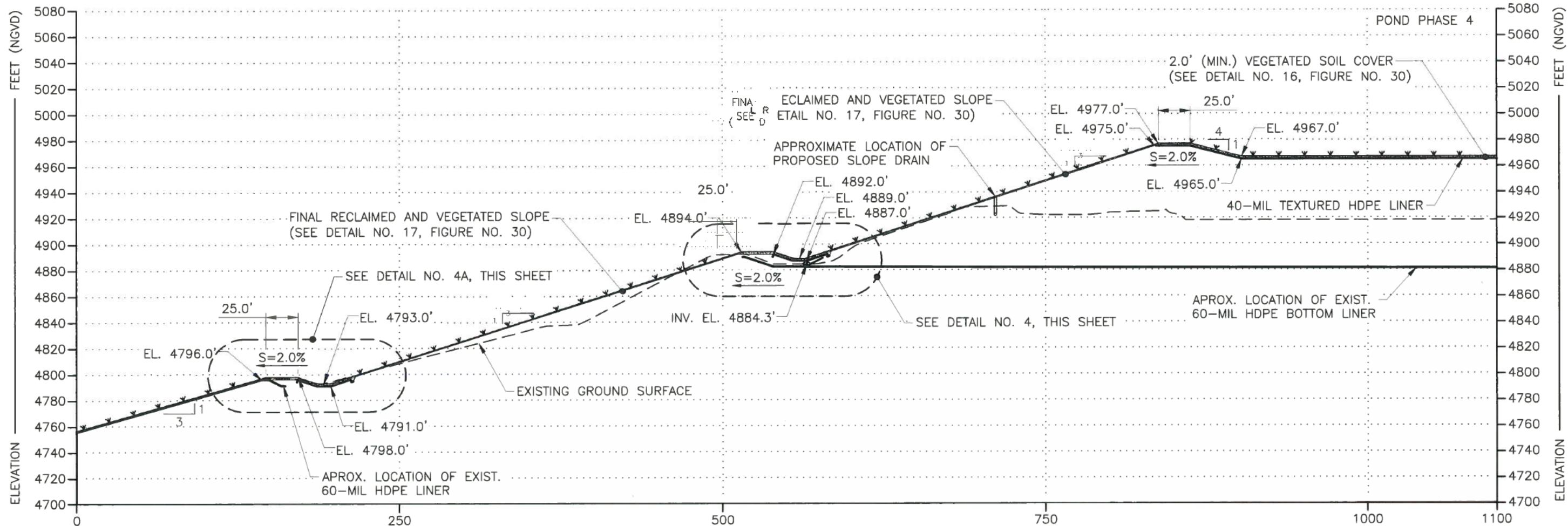
**3 DETAIL CROSS SECTION B**  
SCALE: 1" = 30'

**CROSS SECTION B**

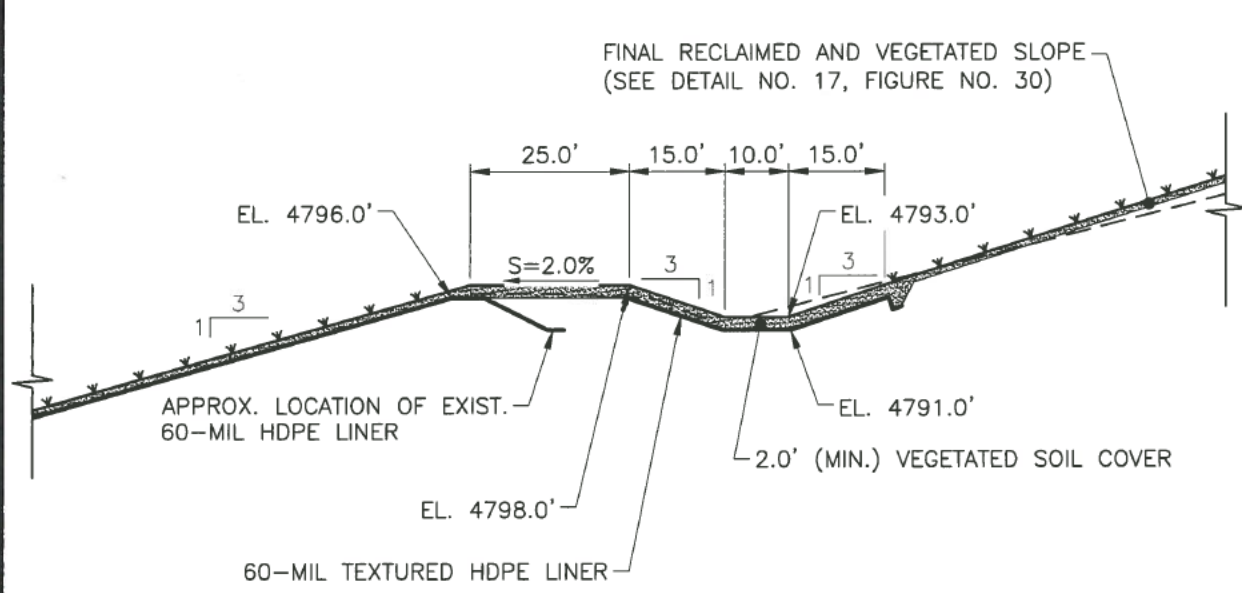
**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and Materials Consultants

**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO

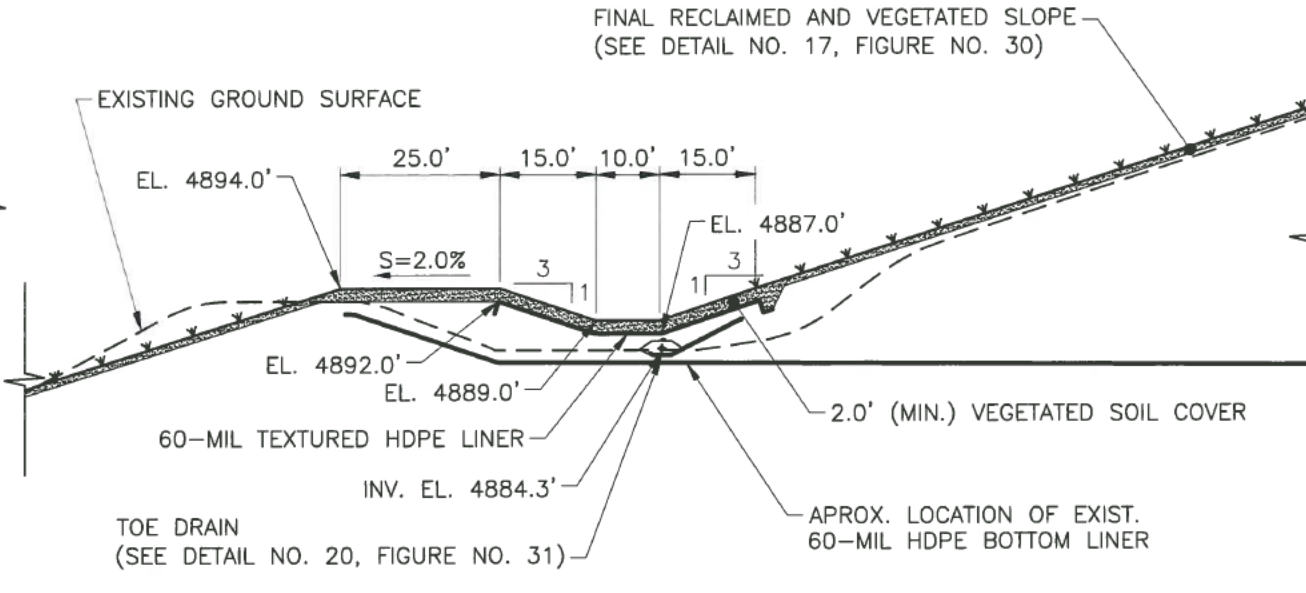
LG	CHECKED BY: LVC	DATE: 03/09/20
BA	APPROVED BY:	FIGURE: 15




**C CROSS SECTION**  
SCALE: 1" = 80'

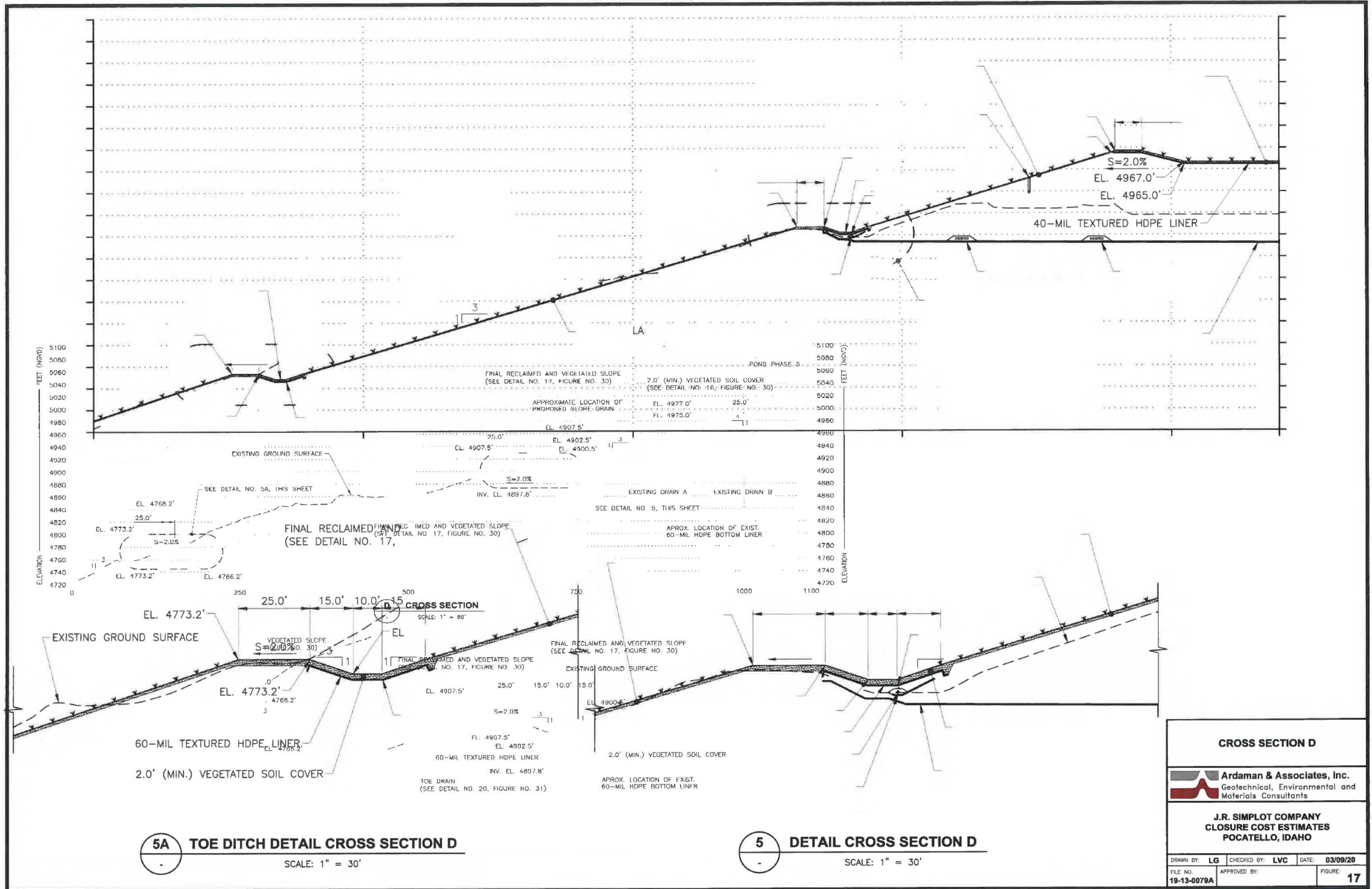


**4A TOE DITCH DETAIL CROSS SECTION C**  
SCALE: 1" = 30'



**4 DETAIL CROSS SECTION C**  
SCALE: 1" = 30'

<b>CROSS SECTION C</b>		
 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants		
<b>J.R. SIMPLOT COMPANY</b> CLOSURE COST ESTIMATES POCATELLO, IDAHO		
DRAWN BY: <b>LG</b>	CHECKED BY: <b>LVC</b>	DATE: <b>03/09/20</b>
FILE NO. <b>19-13-0079A</b>	APPROVED BY:	FIGURE: <b>16</b>



**5A TOE DITCH DETAIL CROSS SECTION D**  
SCALE: 1" = 30'

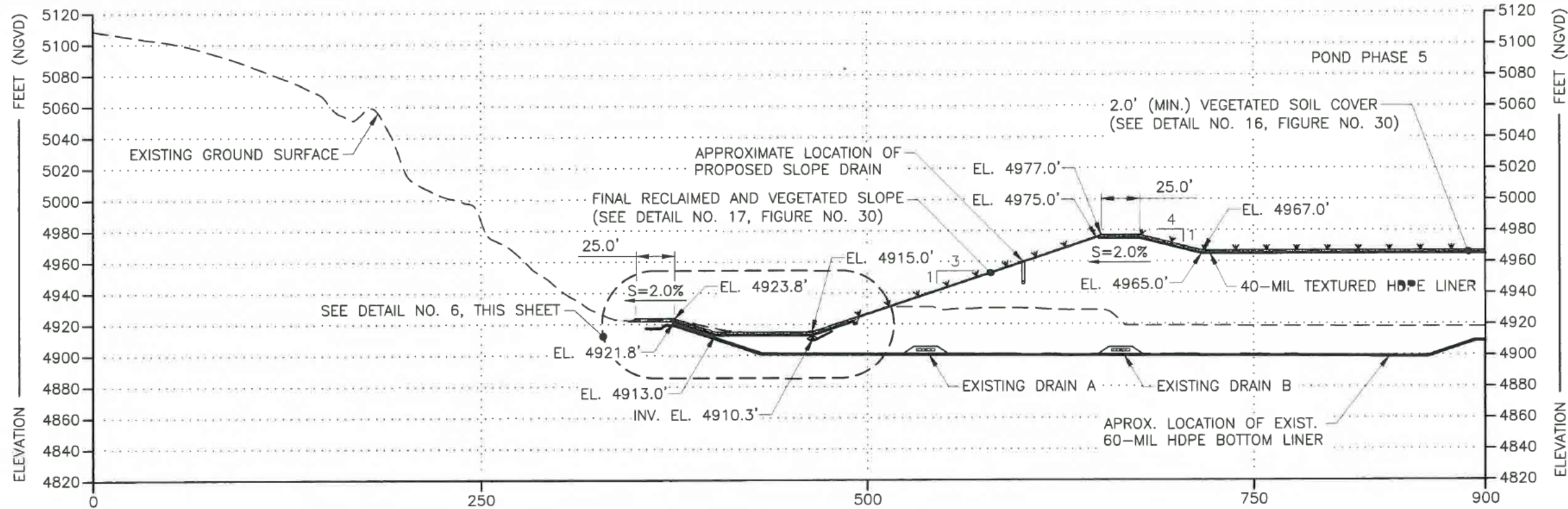
**5 DETAIL CROSS SECTION D**  
SCALE: 1" = 30'

**CROSS SECTION D**

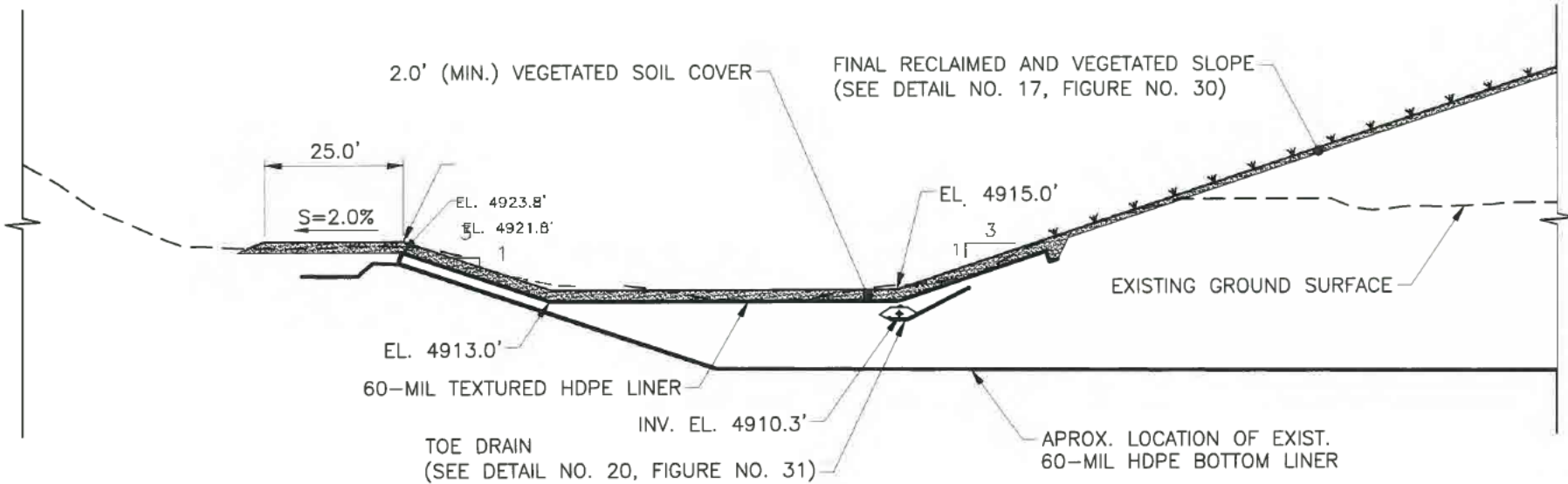
**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and  
Materials Consultants

**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO

DRAWN BY: <b>LG</b>	CHECKED BY: <b>LVC</b>	DATE: <b>03/09/20</b>
FILE NO. <b>19-13-0079A</b>	APPROVED BY:	FIGURE: <b>17</b>



**E CROSS SECTION**  
SCALE: 1" = 80'



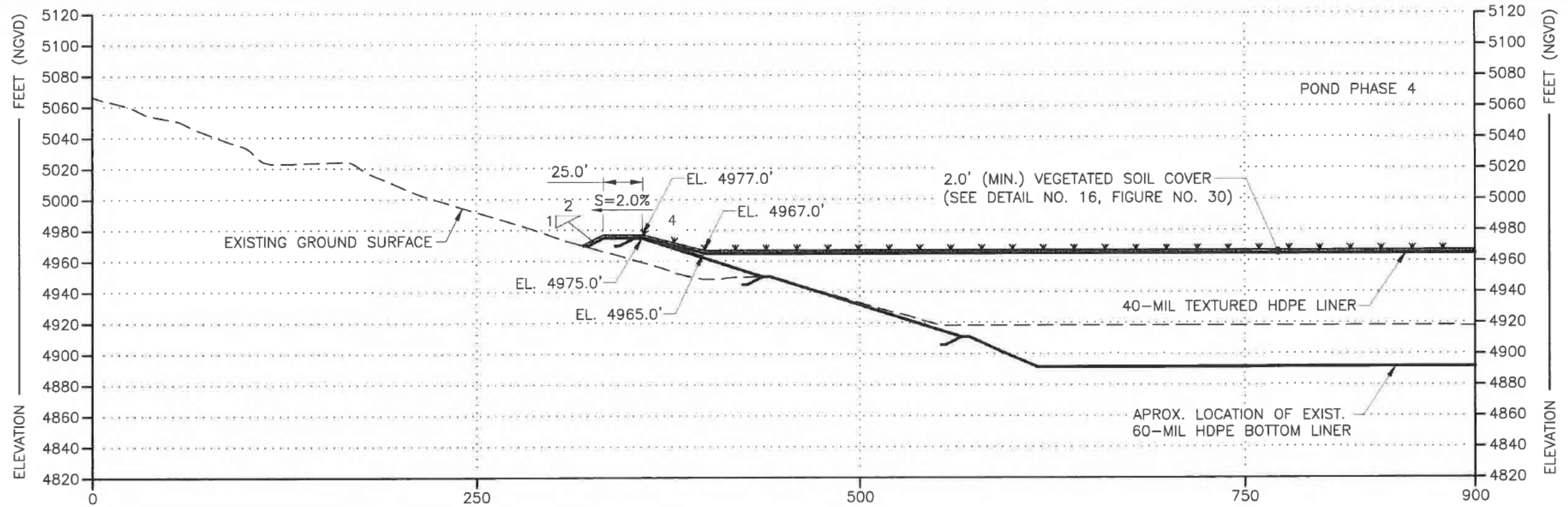
**6 DETAIL CROSS SECTION E**  
SCALE: 1" = 30'

**CROSS SECTION E**

**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and Materials Consultants

**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO

DRAWN BY: LG	CHECKED BY: LVC	DATE: 03/09/20
FILE NO: 18-13-00/9A	APPROVED BY:	FIGURE: 18



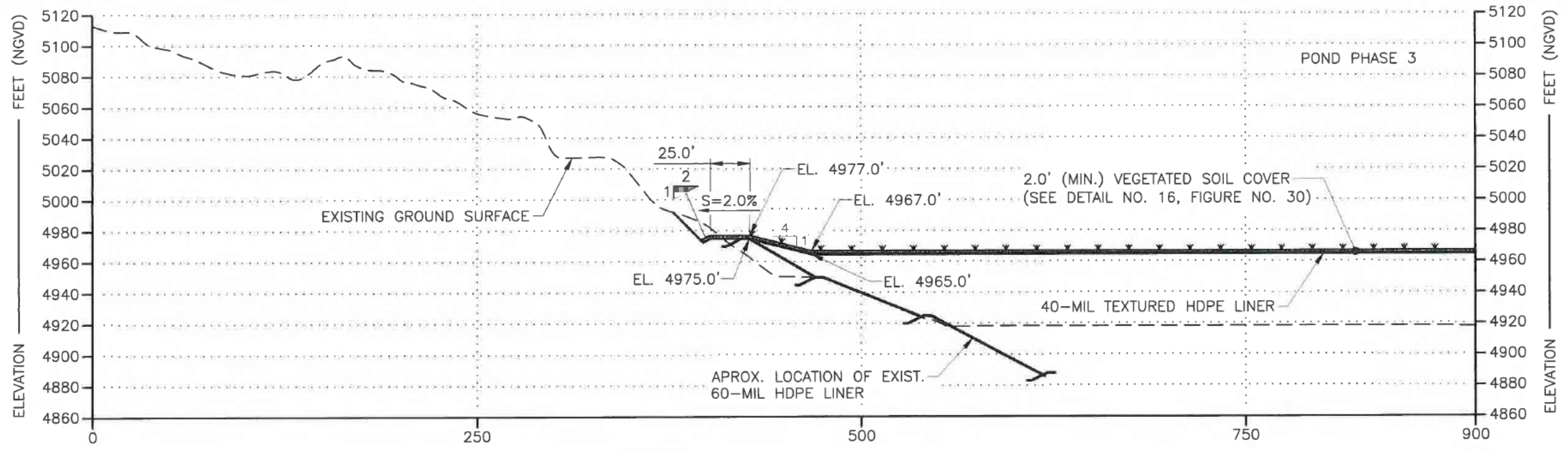
**F CROSS SECTION**  
SCALE: 1" = 80'

**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and Materials Consultants


**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO

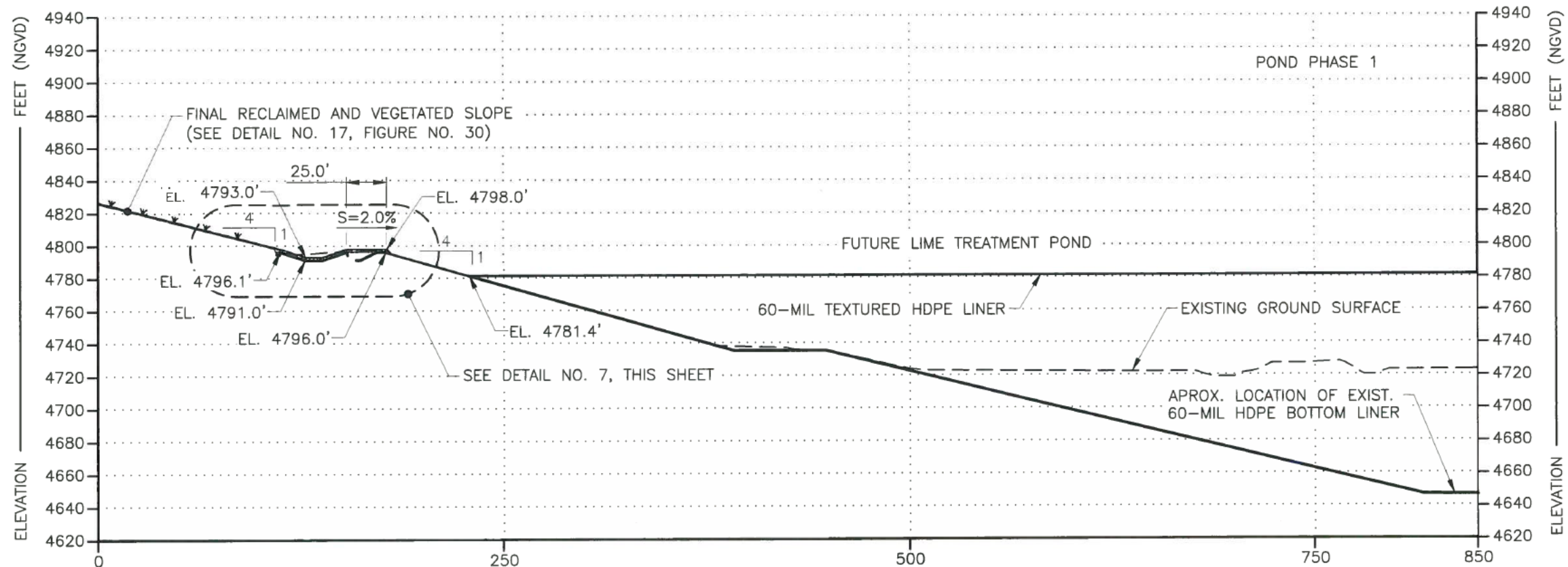
DRAWN BY: LG	CHECKED BY: LVC	DATE: 03/09/20
FILE NO: 18-13-0079A	APPROVED BY:	FIGURE: 19



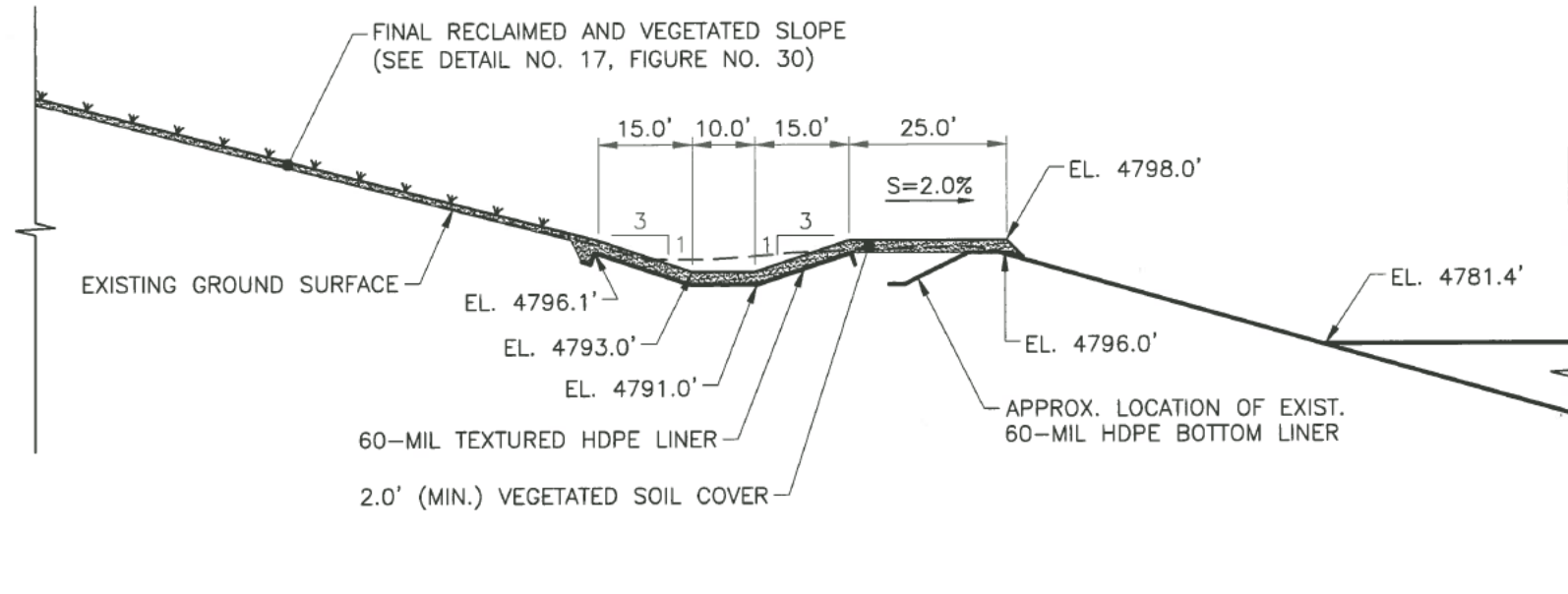


**G CROSS SECTION**  
 SCALE: 1" = 80'

<b>CROSS SECTION G</b>		
 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants		
<b>J.R. SIMPLOT COMPANY</b> CLOSURE COST ESTIMATE'S POCA TELLO, IDAHO		
DRAWN BY: <b>LG</b>	CHECKED BY: <b>LVC</b>	DATE: <b>03/09/20</b>
FILE NO. <b>18-13-0078A</b>	APPROVED BY:	FIGURE: <b>20</b>



**H CROSS SECTION**  
SCALE: 1" = 80'



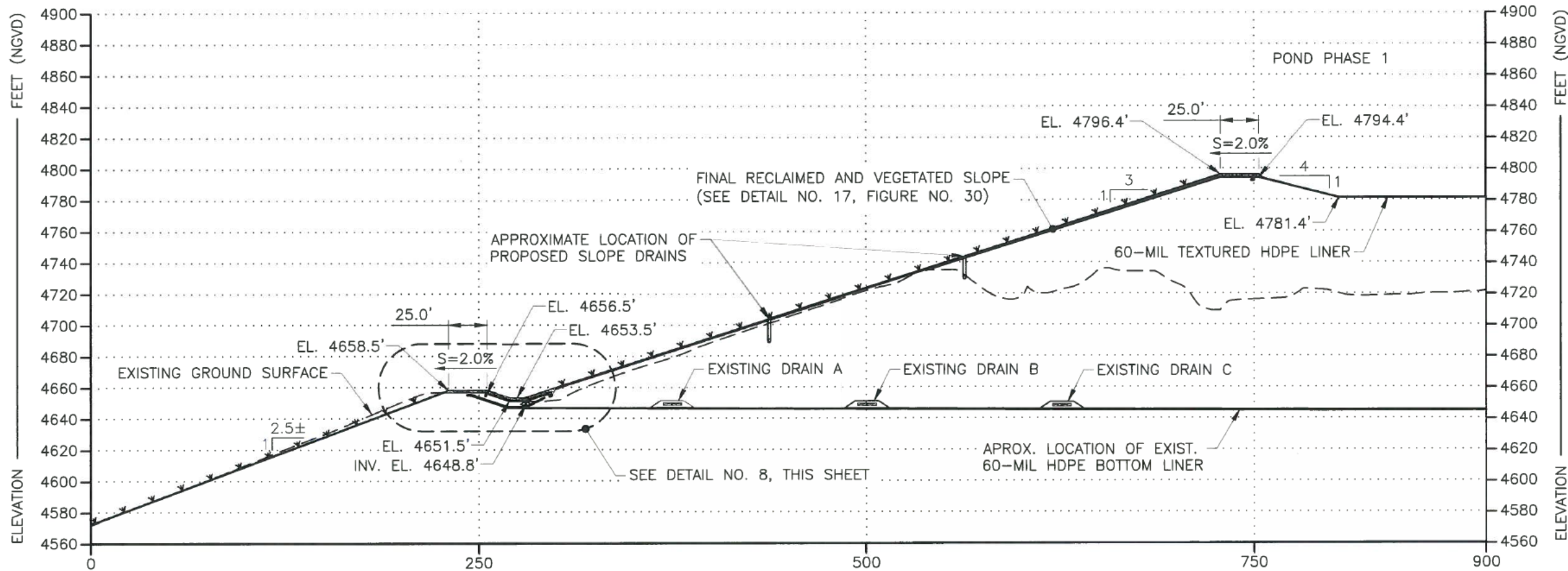
**7 DETAIL CROSS SECTION H**  
SCALE: 1" = 30'

**CROSS SECTION H**

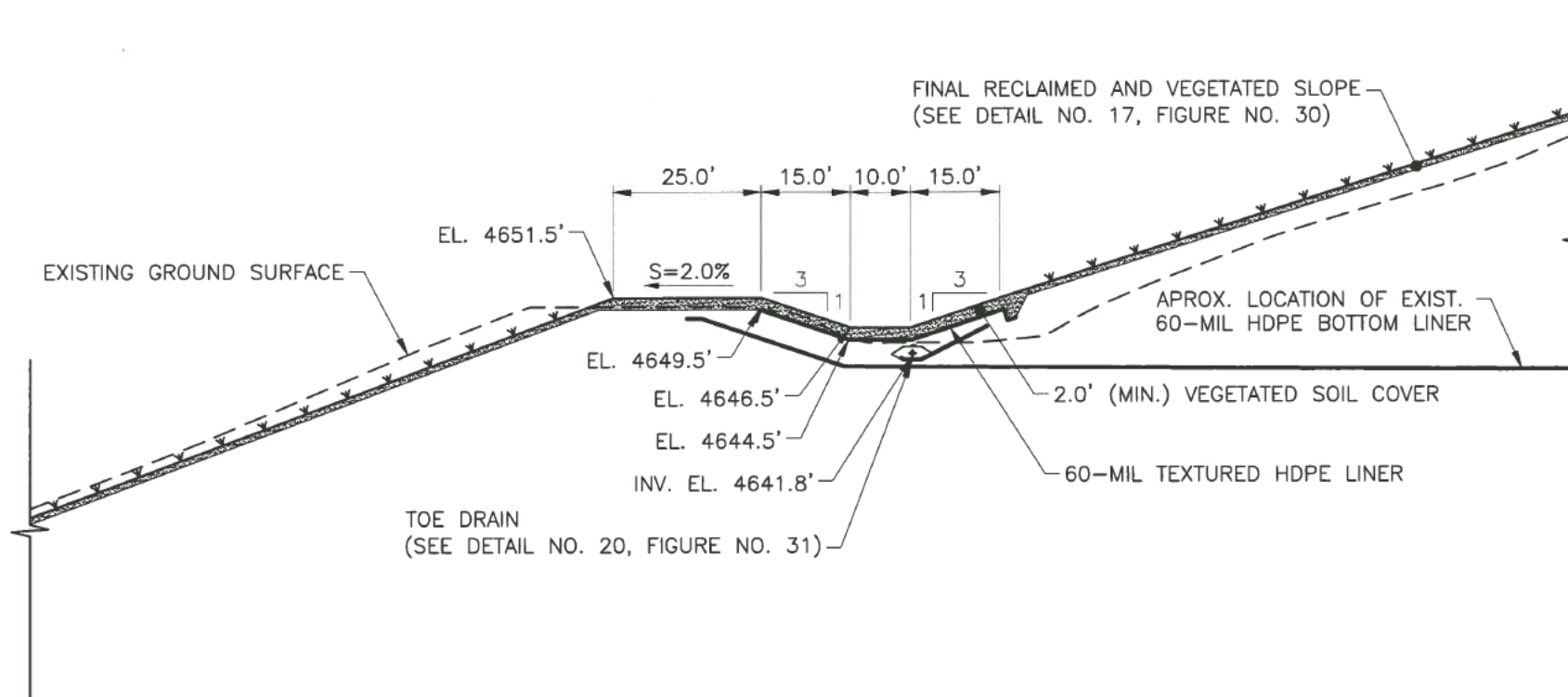
**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and Materials Consultants

**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO


DRAWN BY: LG	CHECKED BY: LVC	DATE: 03/09/20
FILE NO: 19-13-0079A	APPROVED BY:	FIGURE: 21

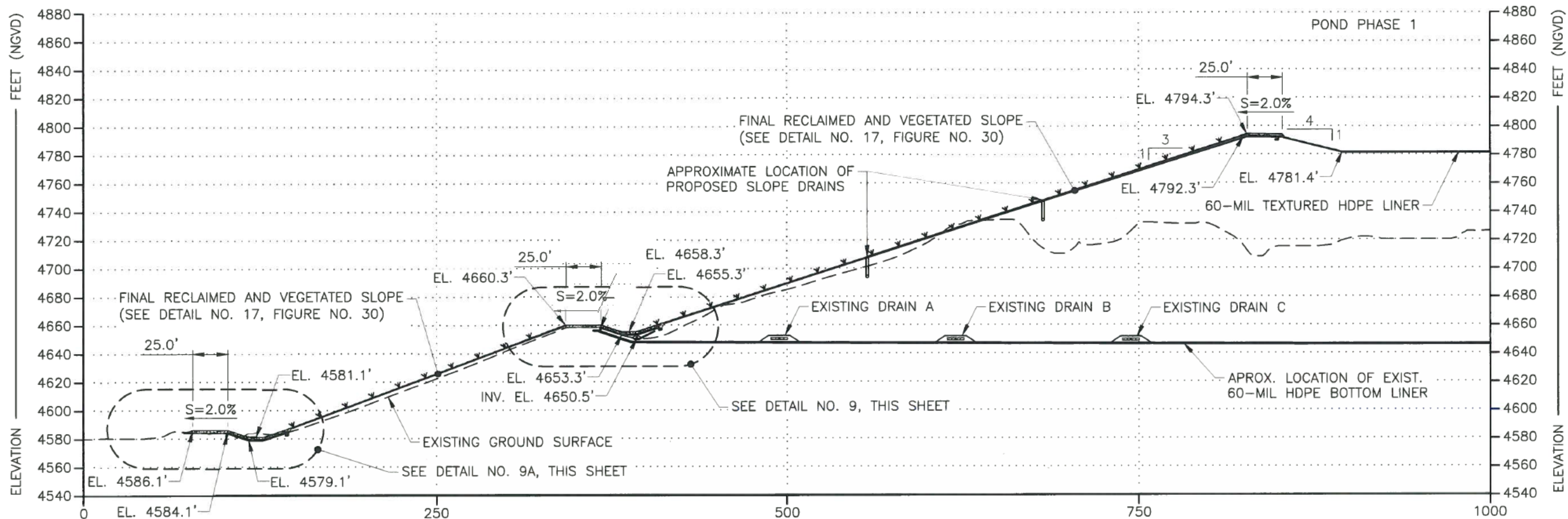


**I CROSS SECTION**  
SCALE: 1" = 80'

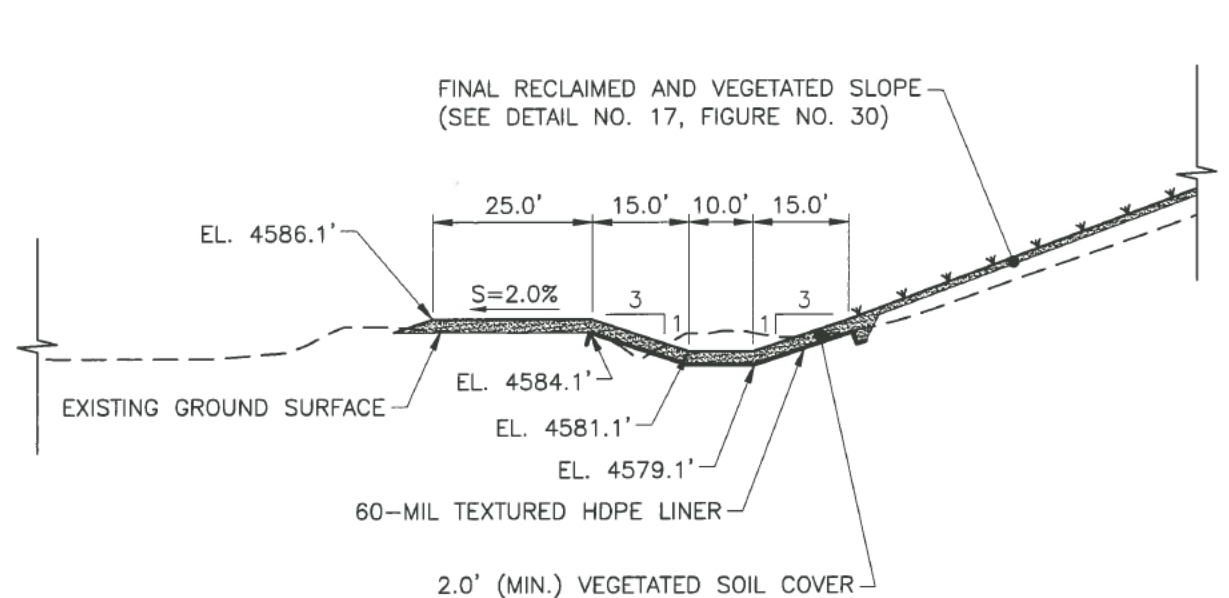


**8 DETAIL CROSS SECTION I**  
SCALE: 1" = 30'

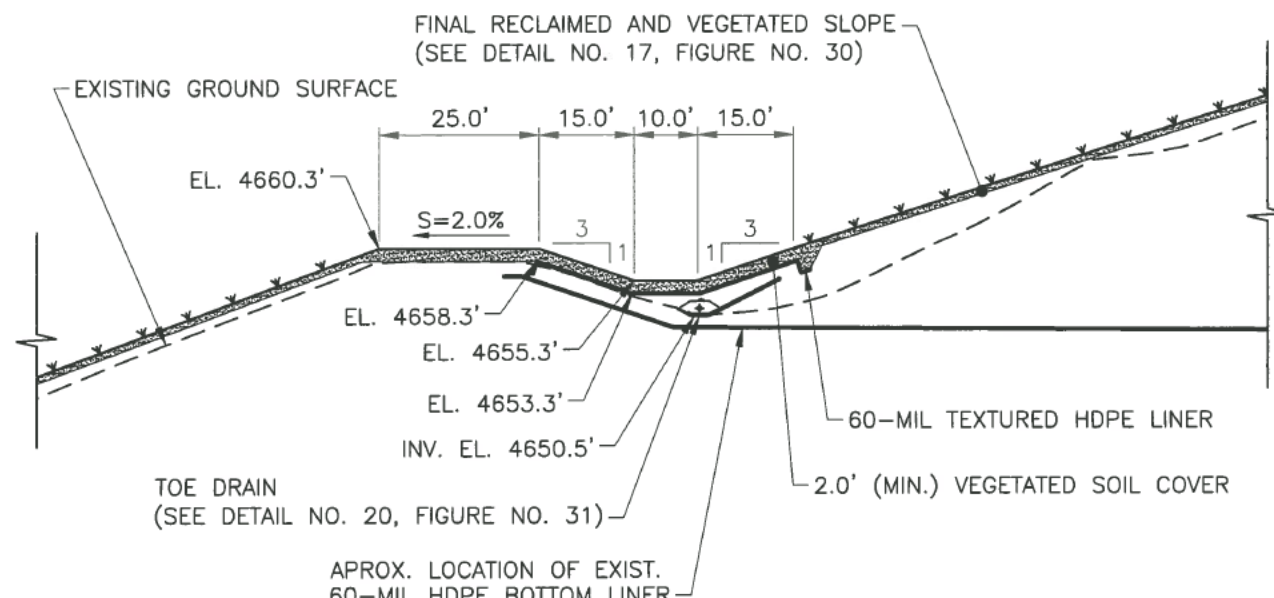
<b>CROSS SECTION I</b>		
 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants		
<b>J.R. SIMPLOT COMPANY</b> CLOSURE COST ESTIMATES POCA TELLO, IDAHO		
DRAWN BY: <b>LG</b> FILE NO.: <b>19-13-0079A</b>	CHECKED BY: <b>LVC</b> APPROVED BY:	DATE: <b>03/09/20</b> FIGURE: <b>22</b>



**J CROSS SECTION**  
SCALE: 1" = 80'



**TOE DITCH DETAIL CROSS SECTION J**  
SCALE: 1" = 30'



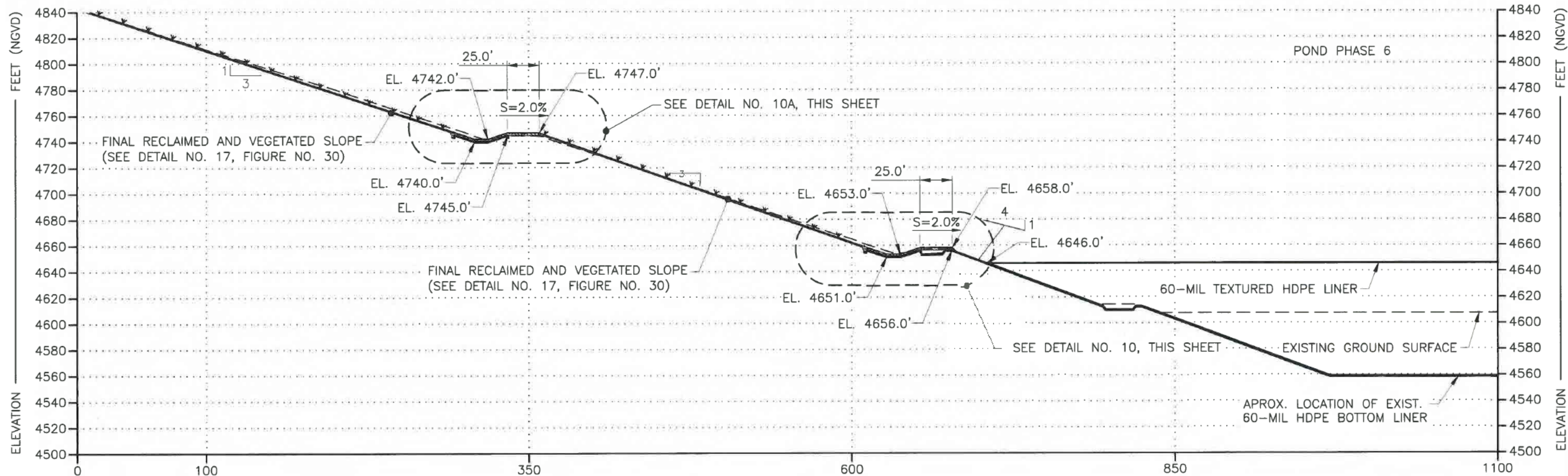
**9 DETAIL CROSS SECTION J**  
SCALE: 1" = 30'

**CROSS SECTION J**

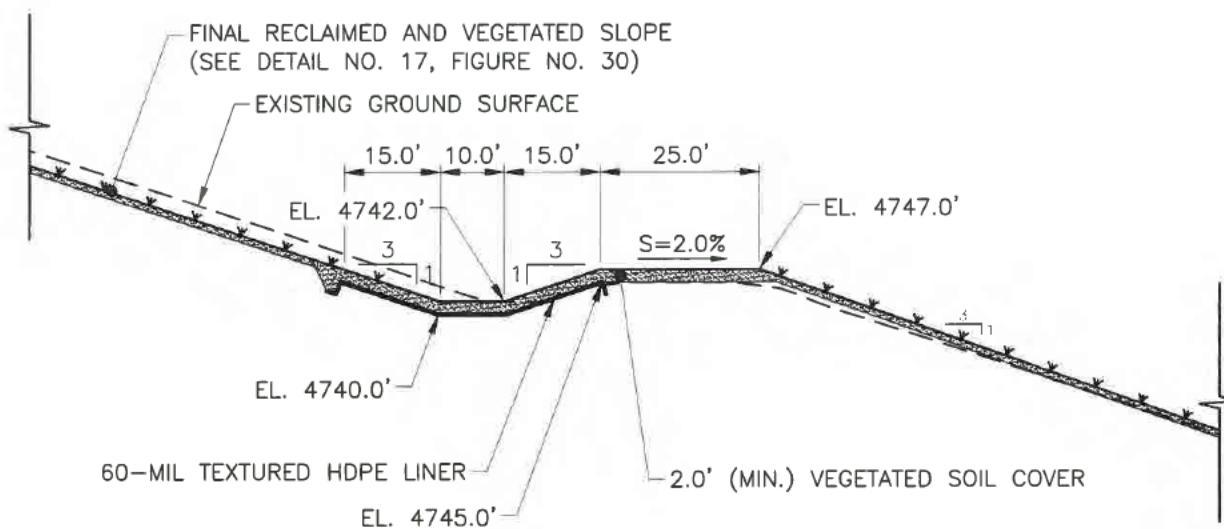
**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and  
Materials Consultants

**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO

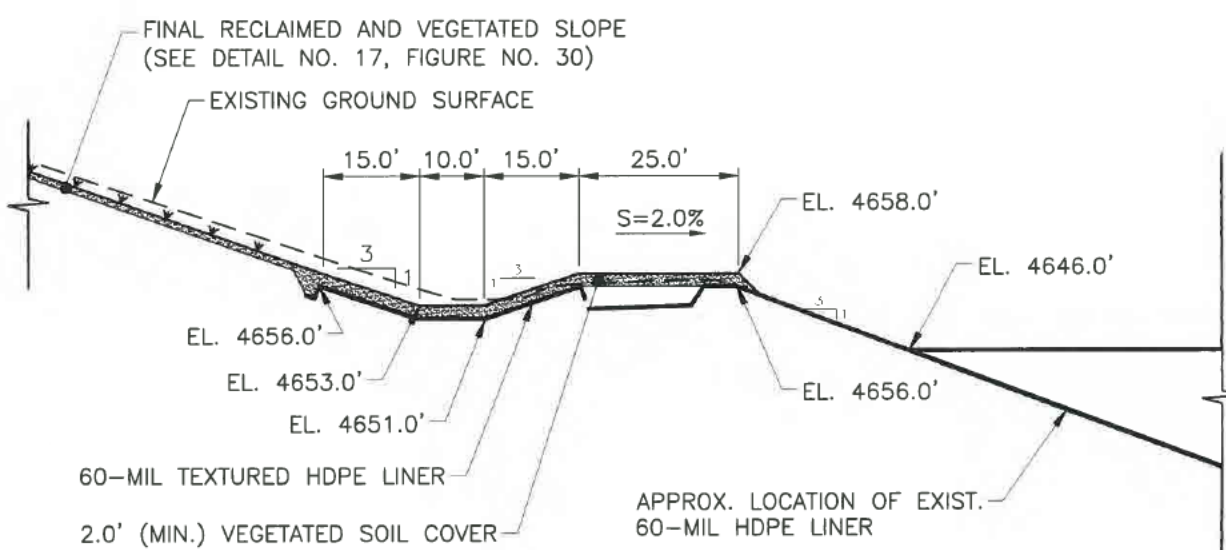
DRAWN BY: LG	CHECKED BY: LVC	DATE: 03/09/20
FILE NO. 19-13-00/9A	APPROVED BY:	FIGURE 23



**K CROSS SECTION**  
SCALE: 1" = 80'



**10A DETAIL CROSS SECTION K**  
SCALE: 1" = 30'



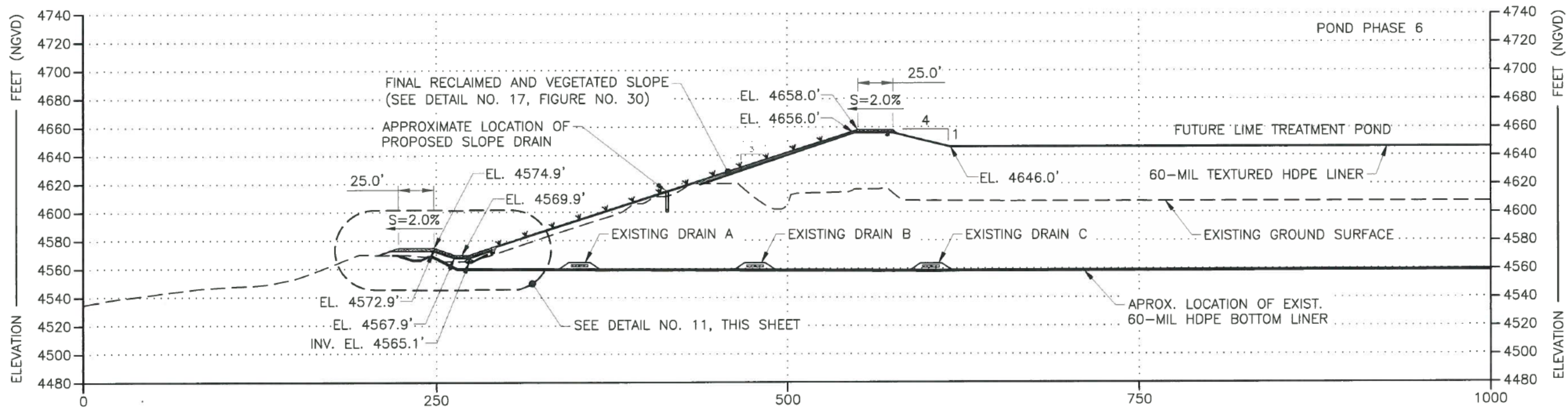
**10 DETAIL CROSS SECTION K**  
SCALE: 1" = 30'

**CROSS SECTION K**

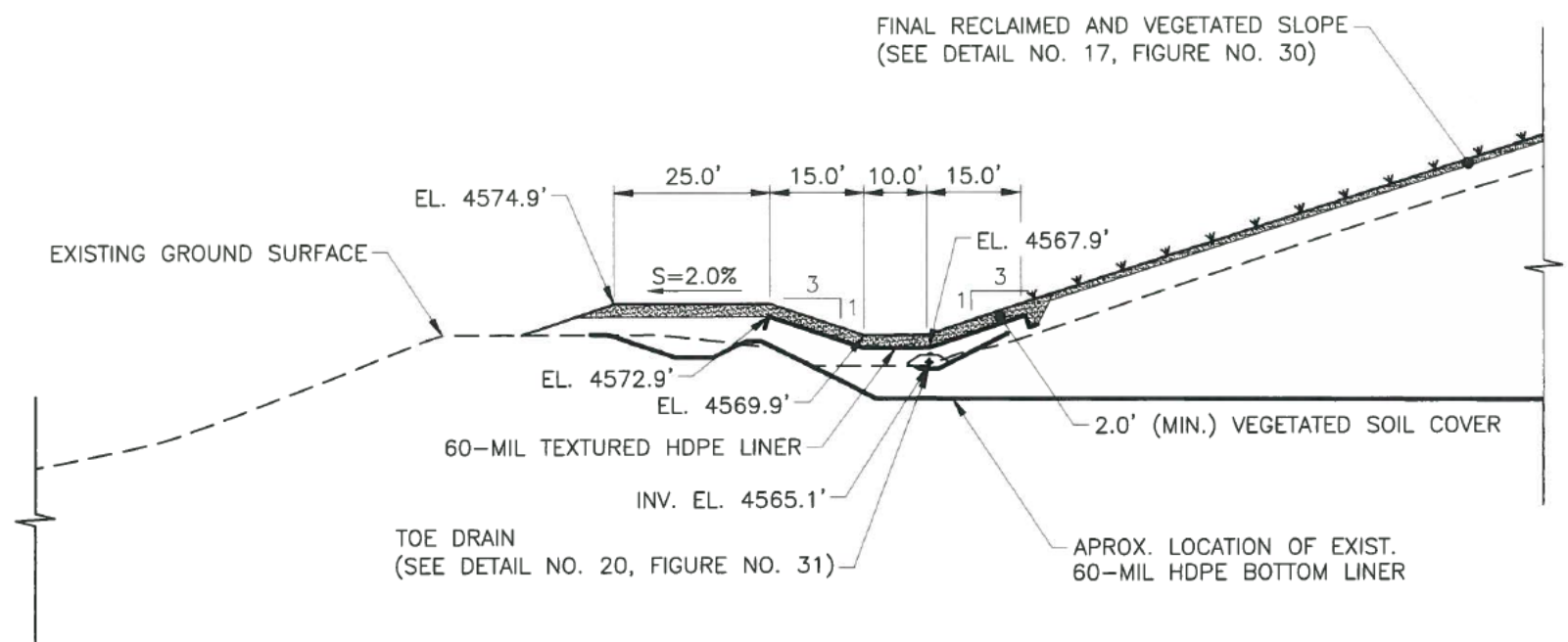
**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and Materials Consultants

**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO

DRAWN BY: <b>LG</b>	CHECKED BY: <b>LVC</b>	DATE: <b>03/09/20</b>
FILE NO. <b>19-13-0079A</b>	APPROVED BY:	FIGURE: <b>24</b>



**L CROSS SECTION**  
SCALE: 1" = 80'



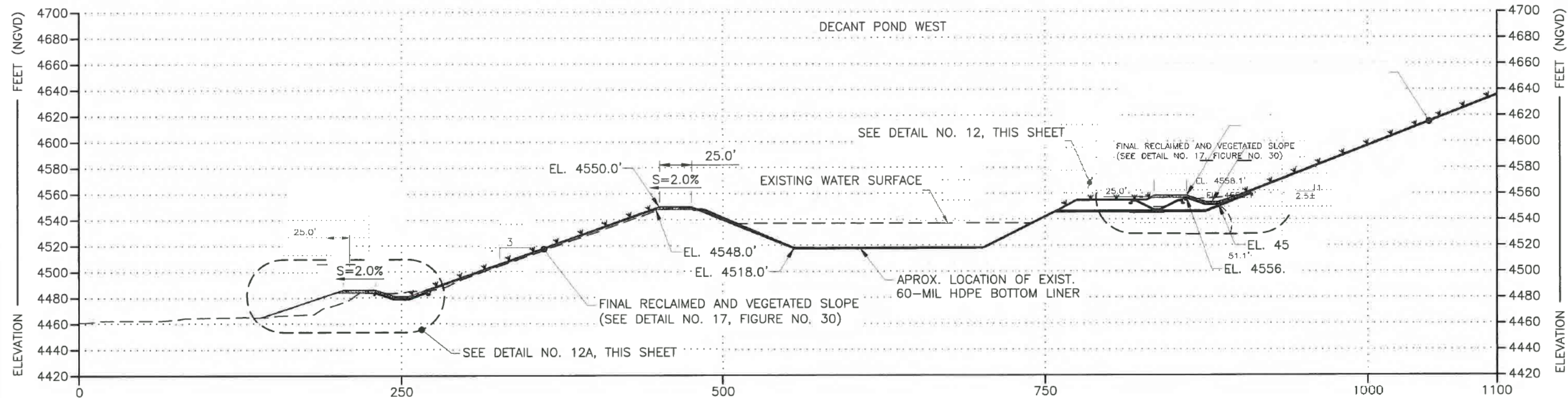
**11 DETAIL CROSS SECTION L**  
SCALE: 1" = 30'

**CROSS SECTION L**

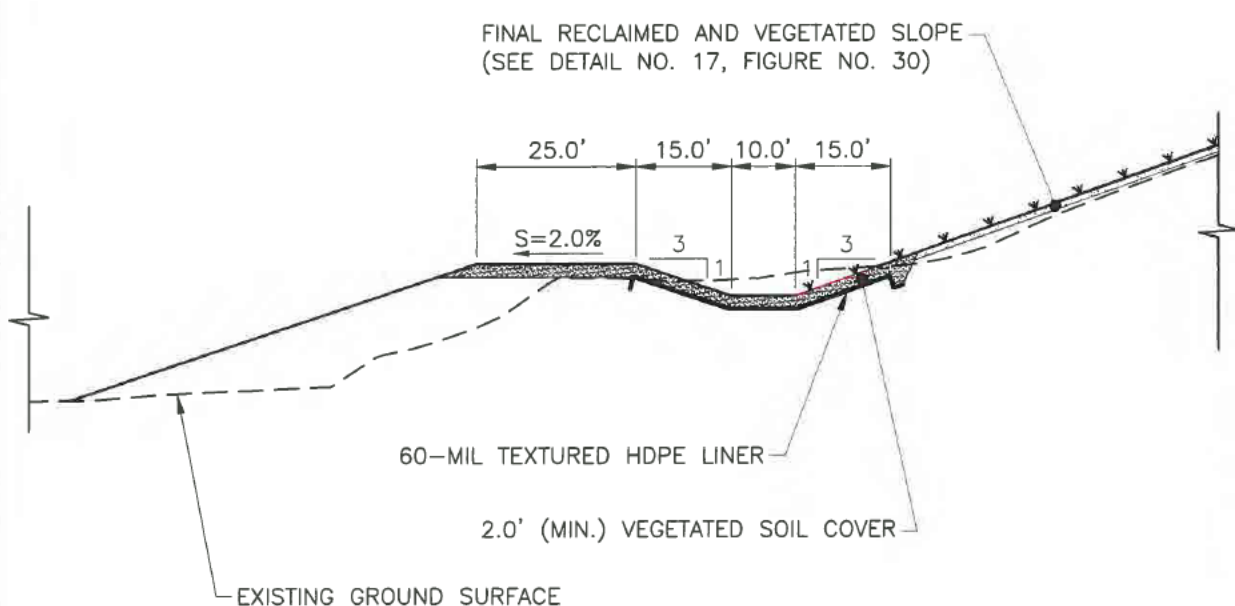
**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and  
Materials Consultants

**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO

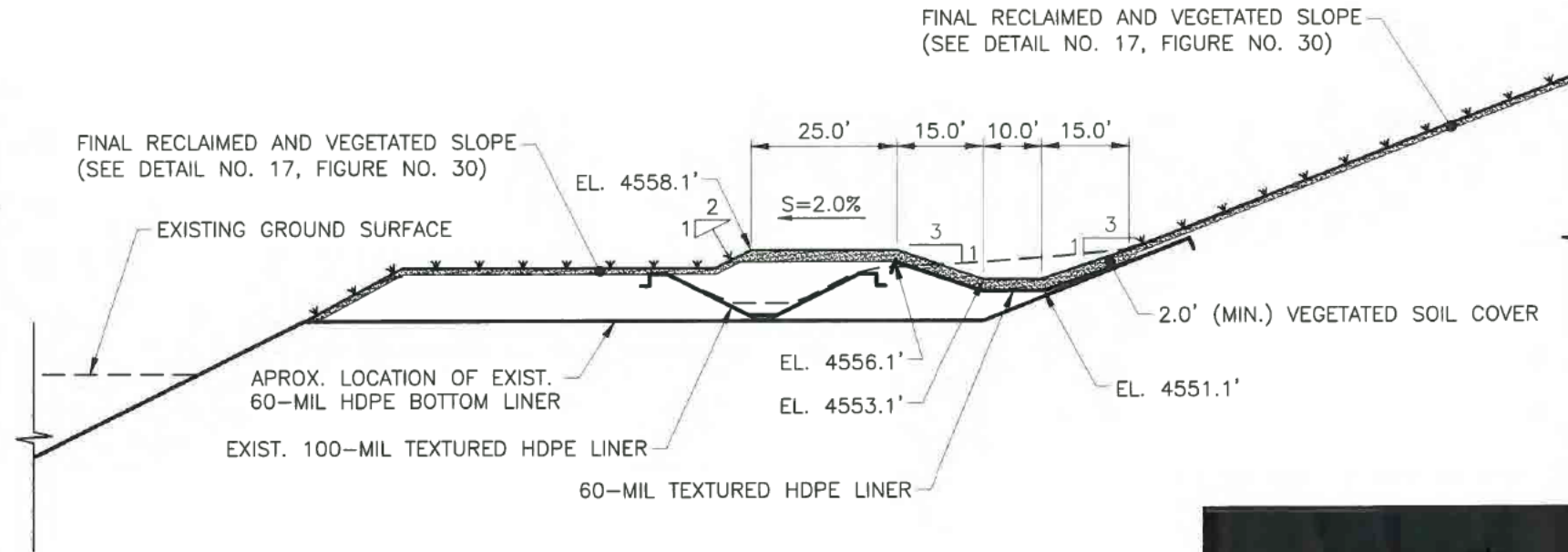
DRAWN BY: 1.0	CHECKED BY: LVC	DATE: 03/09/20
FILE NO. 19-13-0079A	APPROVED BY:	FIGURE 25



**M CROSS SECTION**  
SCALE: 1" = 80'



**12A TOE DITCH DETAIL CROSS SECTION M**  
SCALE: 1" = 30'



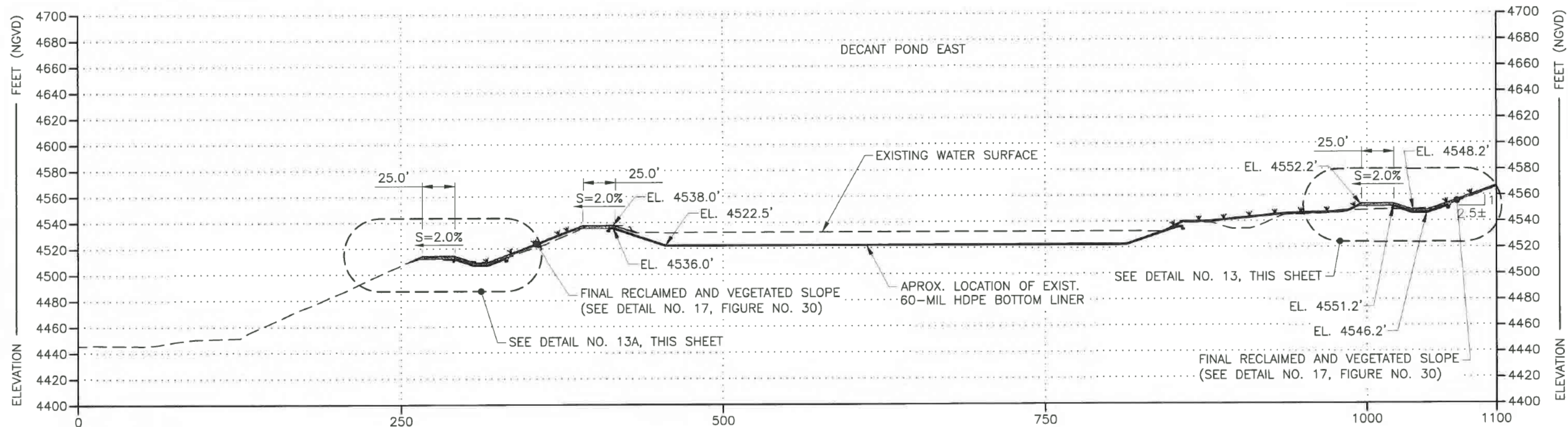
**12 DETAIL CROSS SECTION M**  
SCALE: 1" = 30'

**CROSS SECTION M**

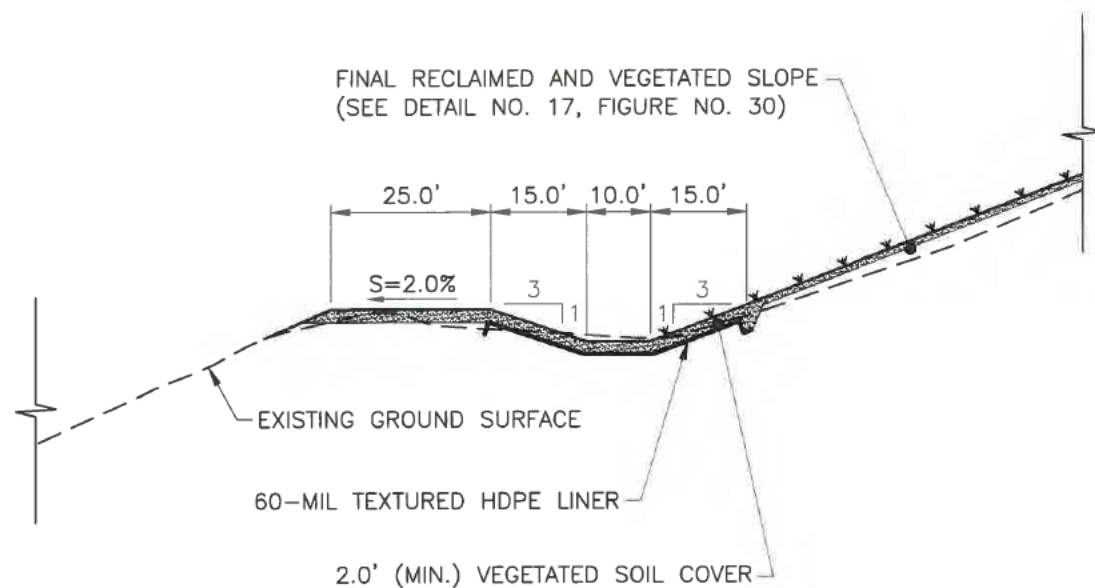
**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and Materials Consultants

**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO

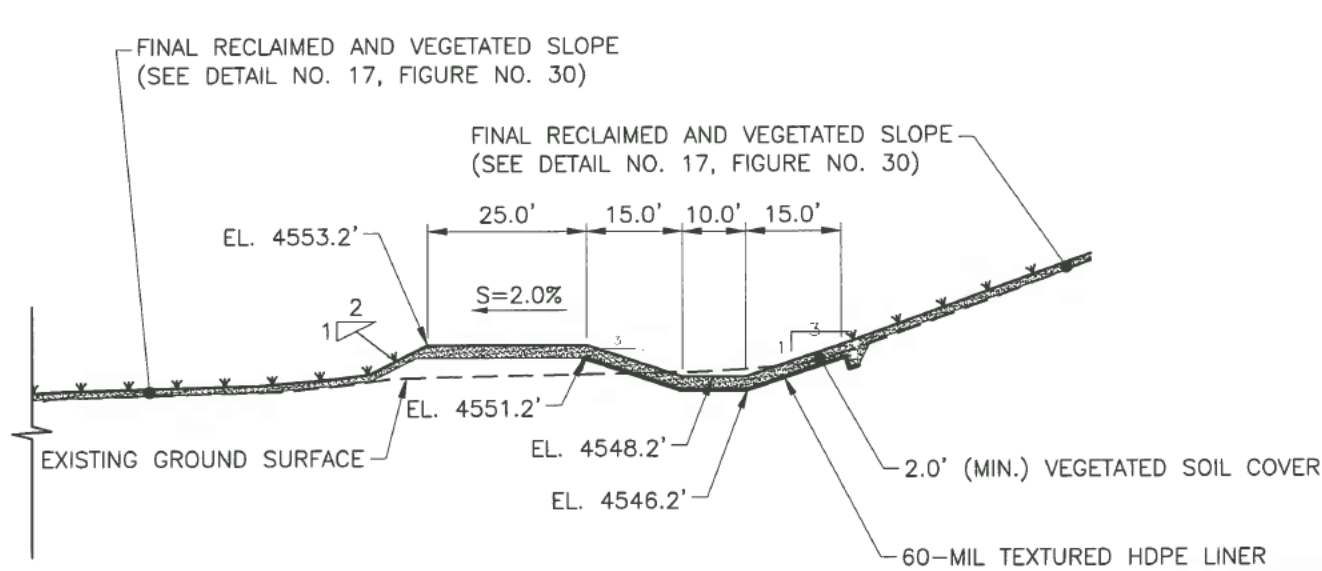
DRAWN BY: LG	CHECKED BY: LVC	DATE: 03/09/20
FILE NO: 19-13-0079A	APPROVED BY:	FIGURE: 26



**N CROSS SECTION**  
SCALE: 1" = 80'



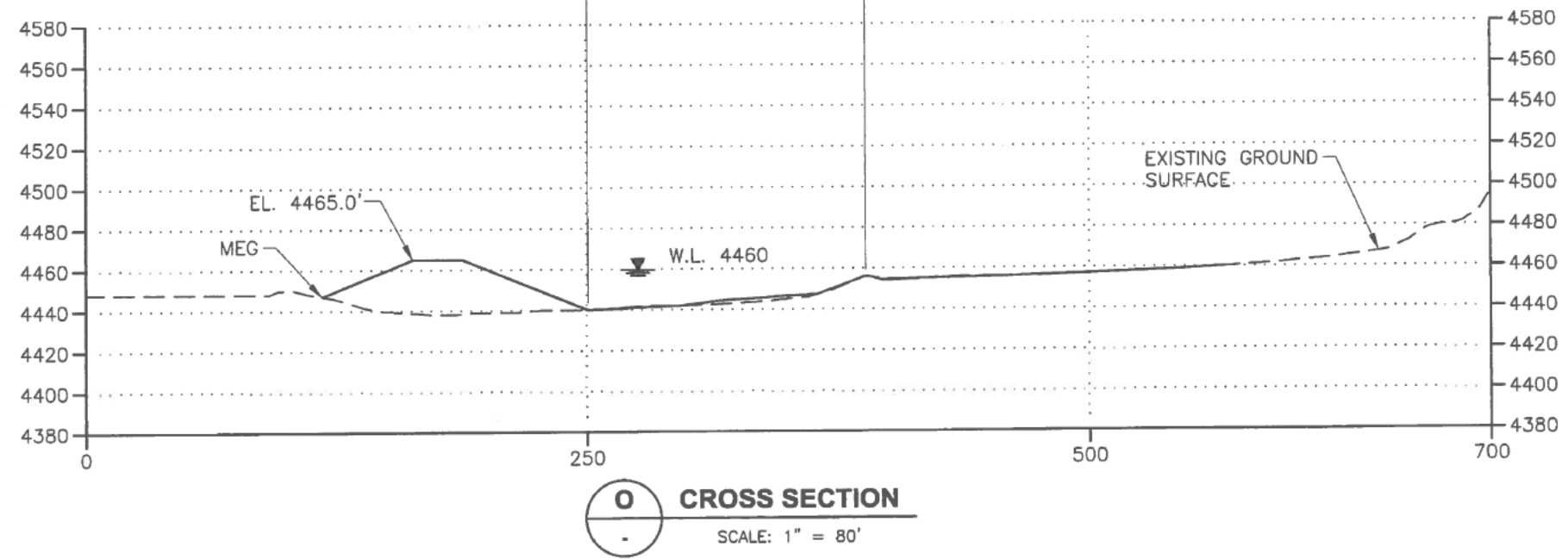
**13A TOE DITCH DETAIL CROSS SECTION N**  
SCALE: 1" = 30'




**13 DETAIL CROSS SECTION N**  
SCALE: 1" = 30'

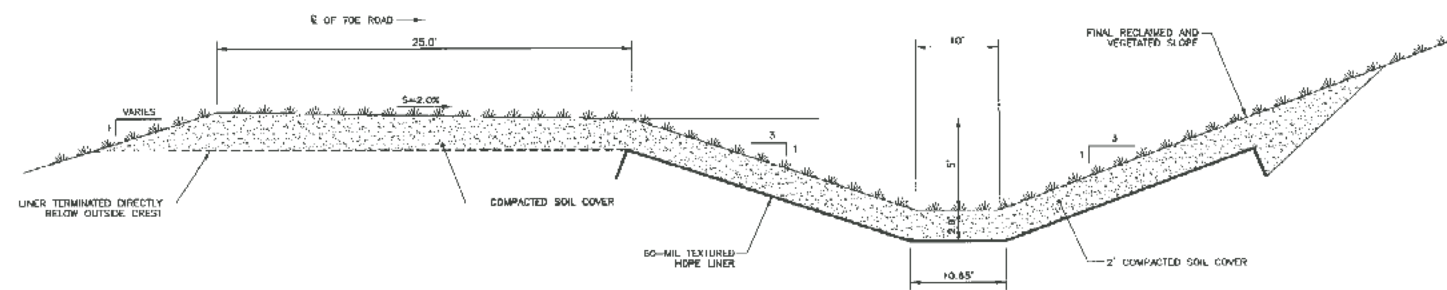
<b>CROSS SECTION N</b>		
 Ardaman & Associates, Inc. Geotechnical, Environmental and Materials Consultants		
<b>J.R. SIMPLOT COMPANY</b> CLOSURE COST ESTIMATES POCA TELLO, IDAHO		
DRAWN BY: <b>LG</b>	CHECKED BY: <b>LVC</b>	DATE: <b>03/09/20</b>
FILE NO: <b>19-13-0079A</b>	APPROVED BY:	FIGURE: <b>27</b>



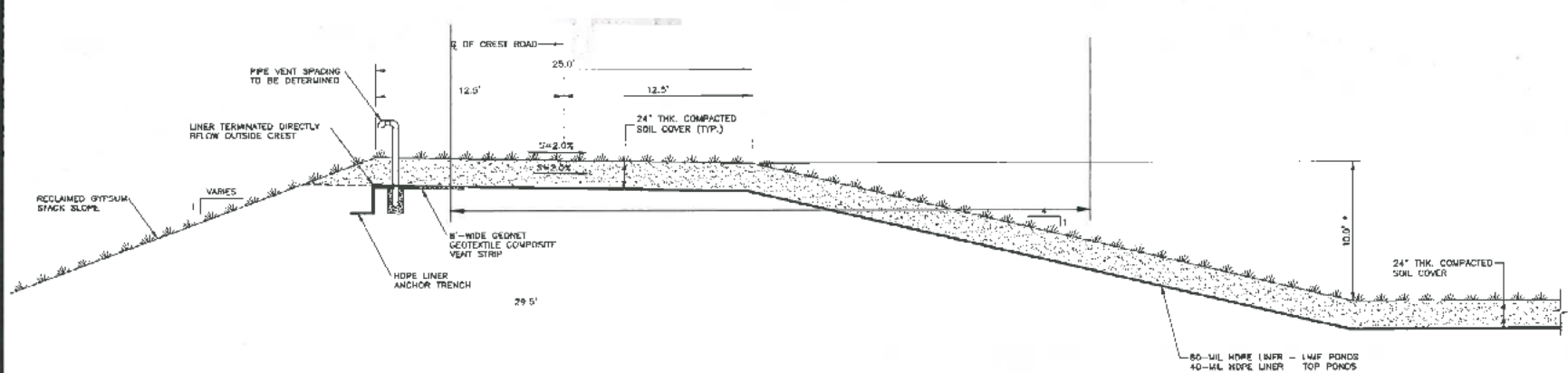


<b>CROSS SECTION - O</b>		
 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants		
<b>J.R. SIMPLOT COMPANY</b> CLOSURE COST ESTIMATES POCAHONTE, IDAHO		
DRAWN BY: SC	CHECKED BY: LVC	DATE: 03/09/20
FILE NO: 19-13-0076A	APPROVED BY:	SHEET: 28

ROAD DETAILS.dwg 7/29/2020 8:18:56 AM, brandon.white



14 TOE ROAD DETAIL  
NOT TO SCALE



15 LINED TOP CAP AND CREST ROAD DETAILS  
NOT TO SCALE

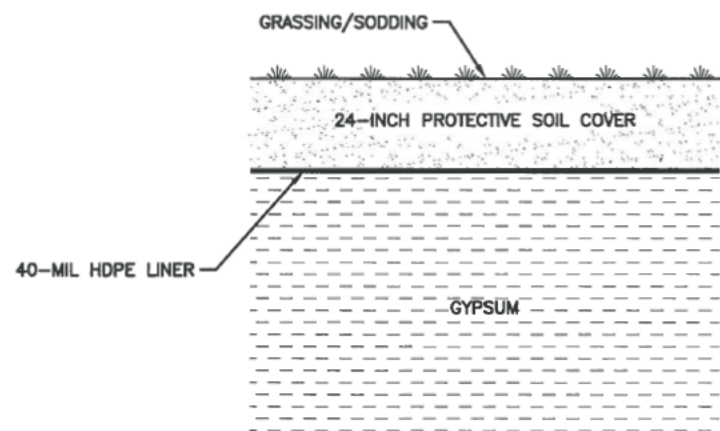
10.0' FOR PHASE 1

**TOE PONDS, MID-SLOPE BENCH & TOE ROAD DETAILS**

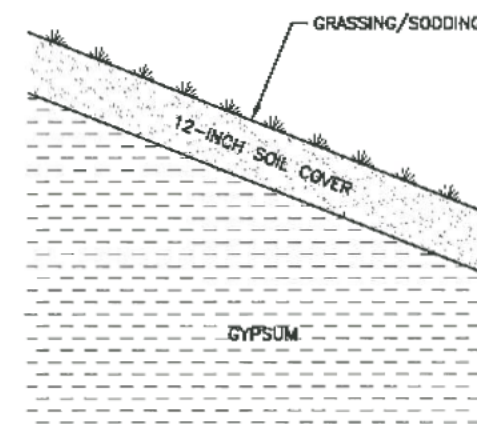
**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and Materials Consultants

**J.R. SIMPLOT COMPANY**  
CLOSURE COST ESTIMATES  
POCATELLO, IDAHO


DRAWN BY: 6G	CHECKED BY: LVC	DATE: 03/09/20
FILE NO: 19-15-0079A	APPROVED BY:	FIGURE: 29

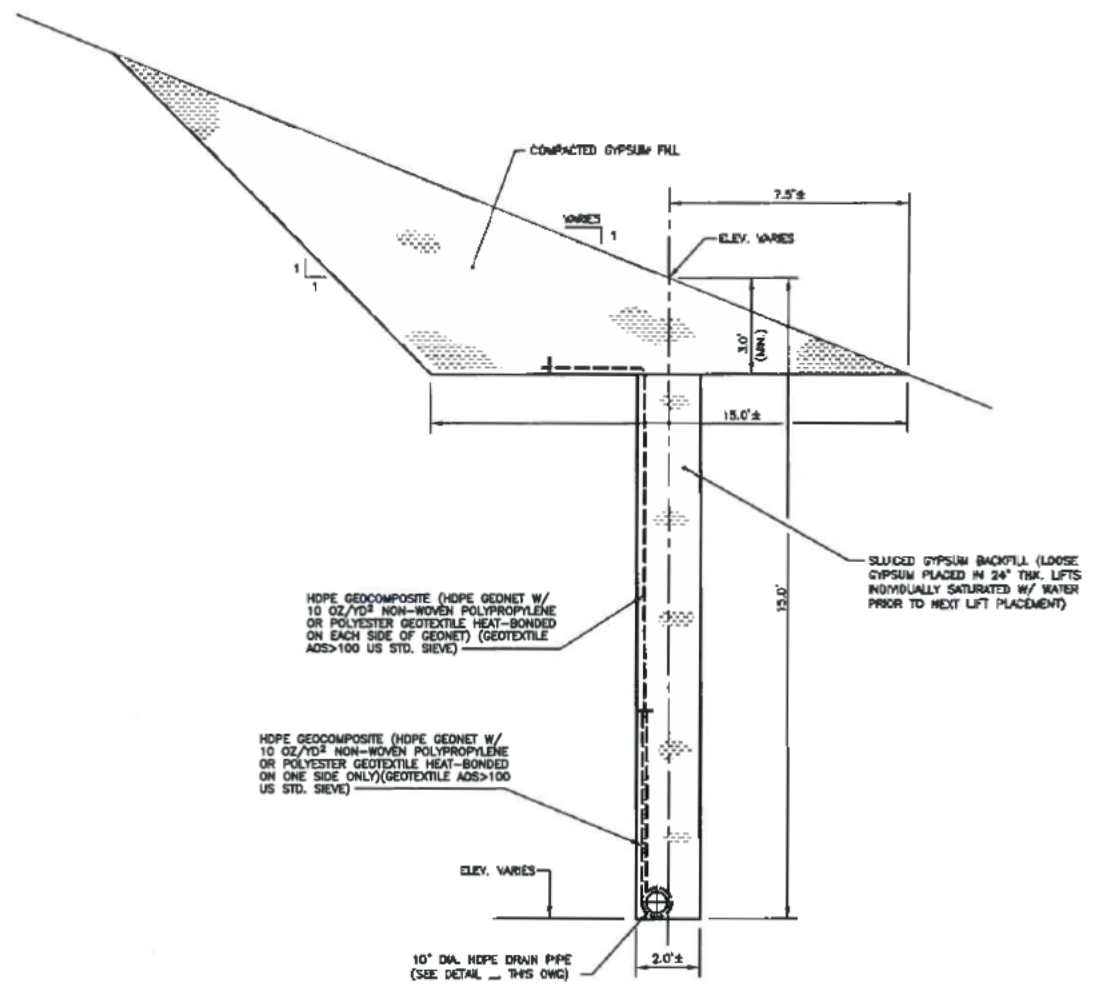


**16** TOP LINER AND COVER DETAIL  
SCALE: 1" = NOT TO SCALE

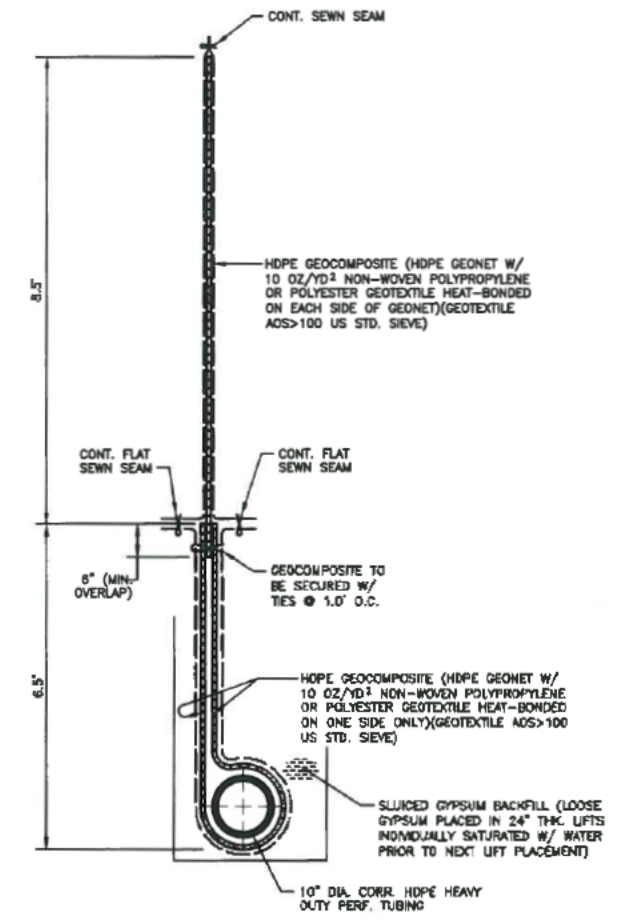


**17** SIDE SLOPE COVER DETAIL  
SCALE: 1" = NOT TO SCALE

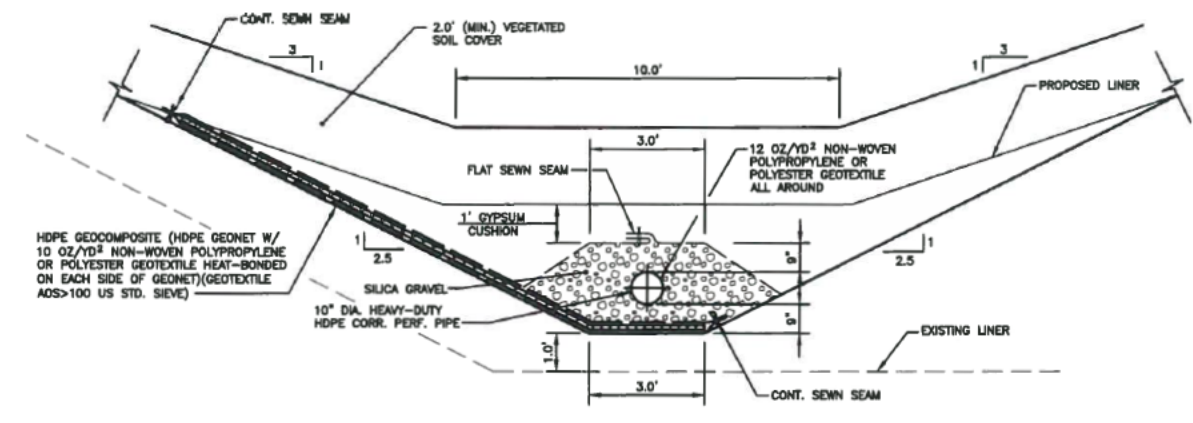
TOP LINER & SIDE SLOPE COVER DETAILS			
 <b>Ardaman &amp; Associates, Inc.</b> Geotechnical, Environmental and Materials Consultants			
<b>CLOSURE COST ESTIMATES</b> <b>J.R. SIMPLOT COMPANY</b> <b>POCATELLO, IDAHO</b>			
DRAWN BY: SC	CHECKED BY: LVC	DATE: 03/09/20	
FILE NO: 19-13-0079A	APPROVED BY:	FIGURE:	<b>30</b>



**18 SLOPE DRAIN DETAIL**  
SCALE: 1" = 3'



**19 DRAIN DETAIL**  
NOT TO SCALE



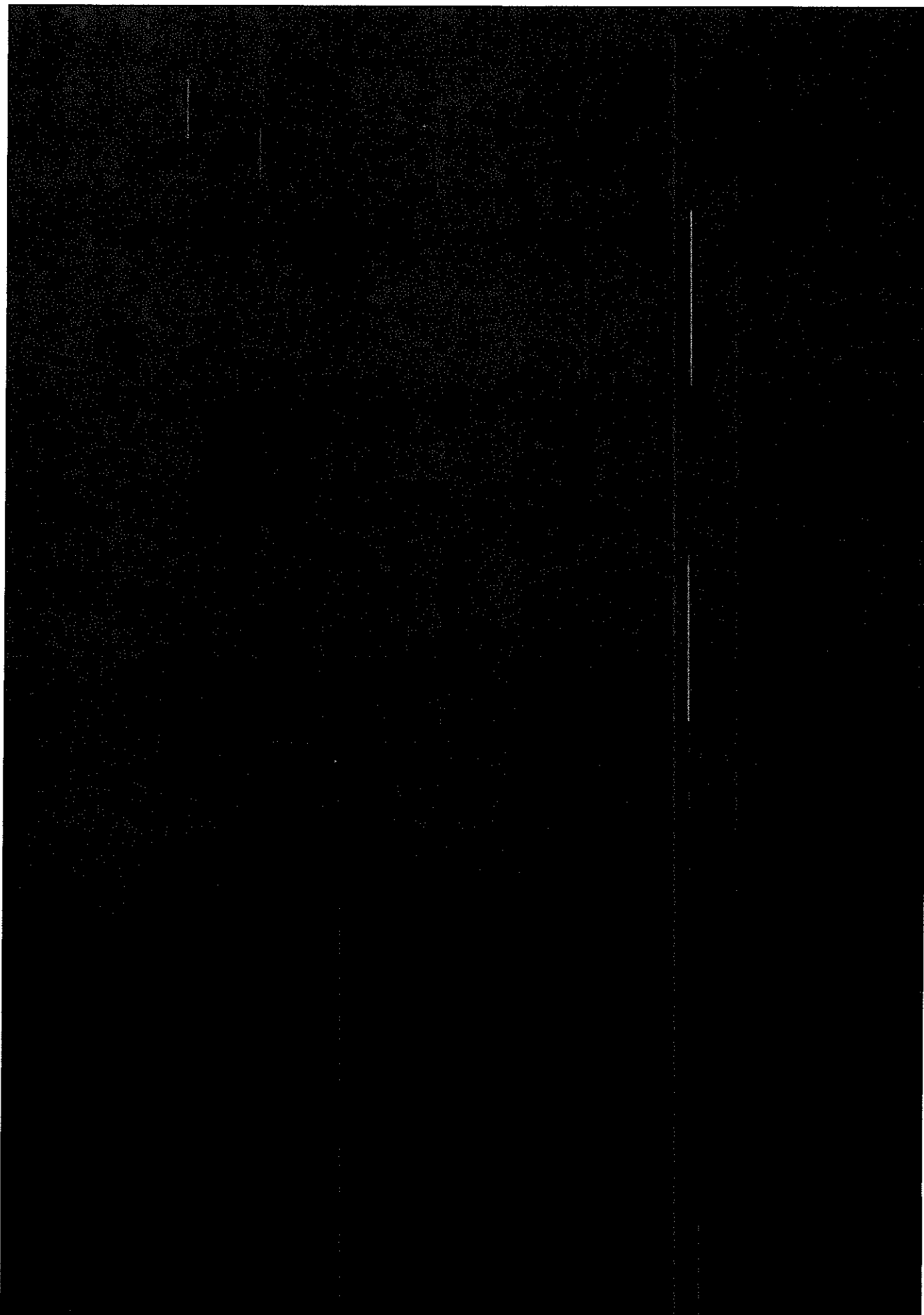
**20 TOE DRAIN DETAIL**  
SCALE: 1" = 5'

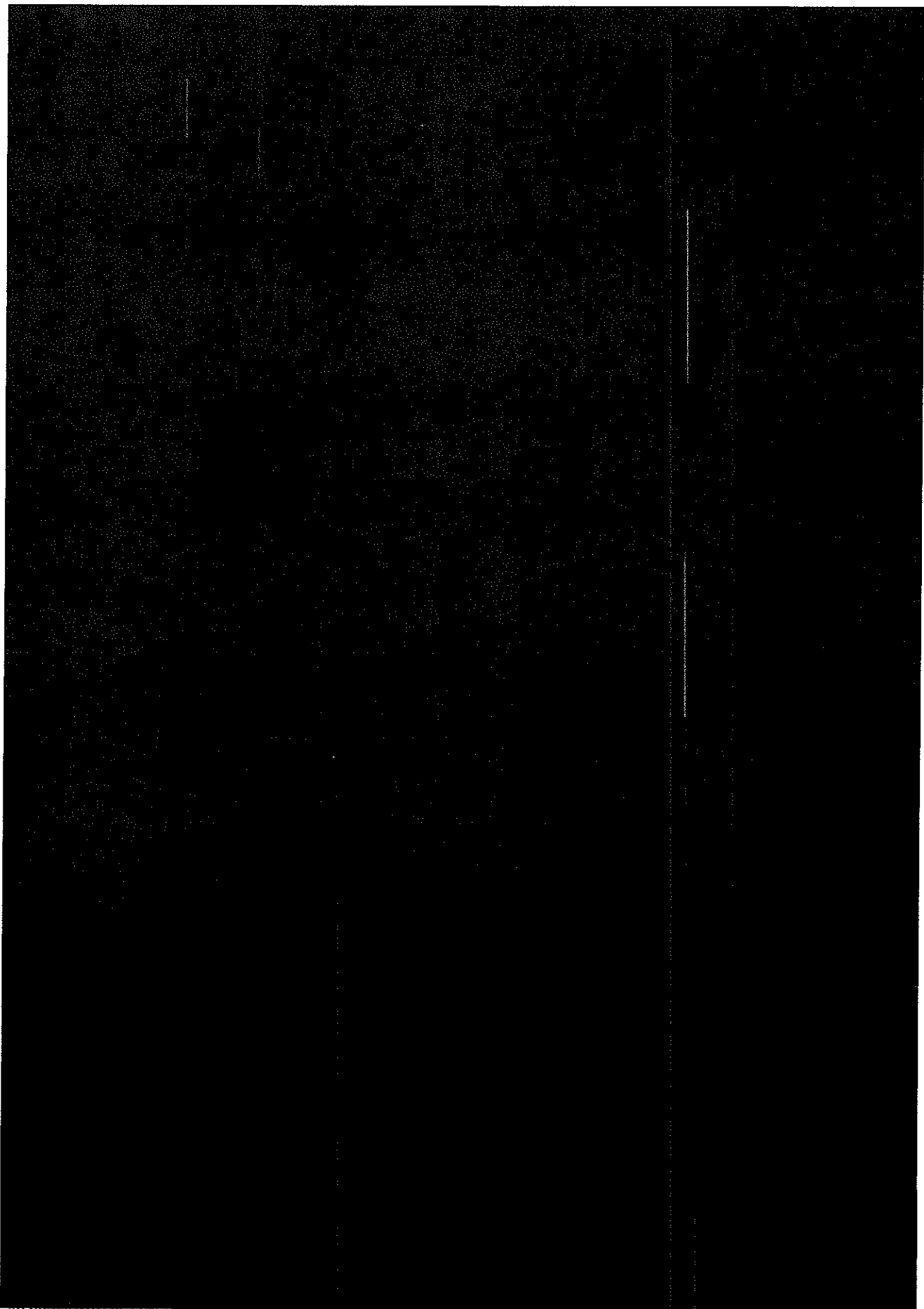
**SEEPAGE COLLECTION  
SLOPE & TOE DRAIN DETAILS**

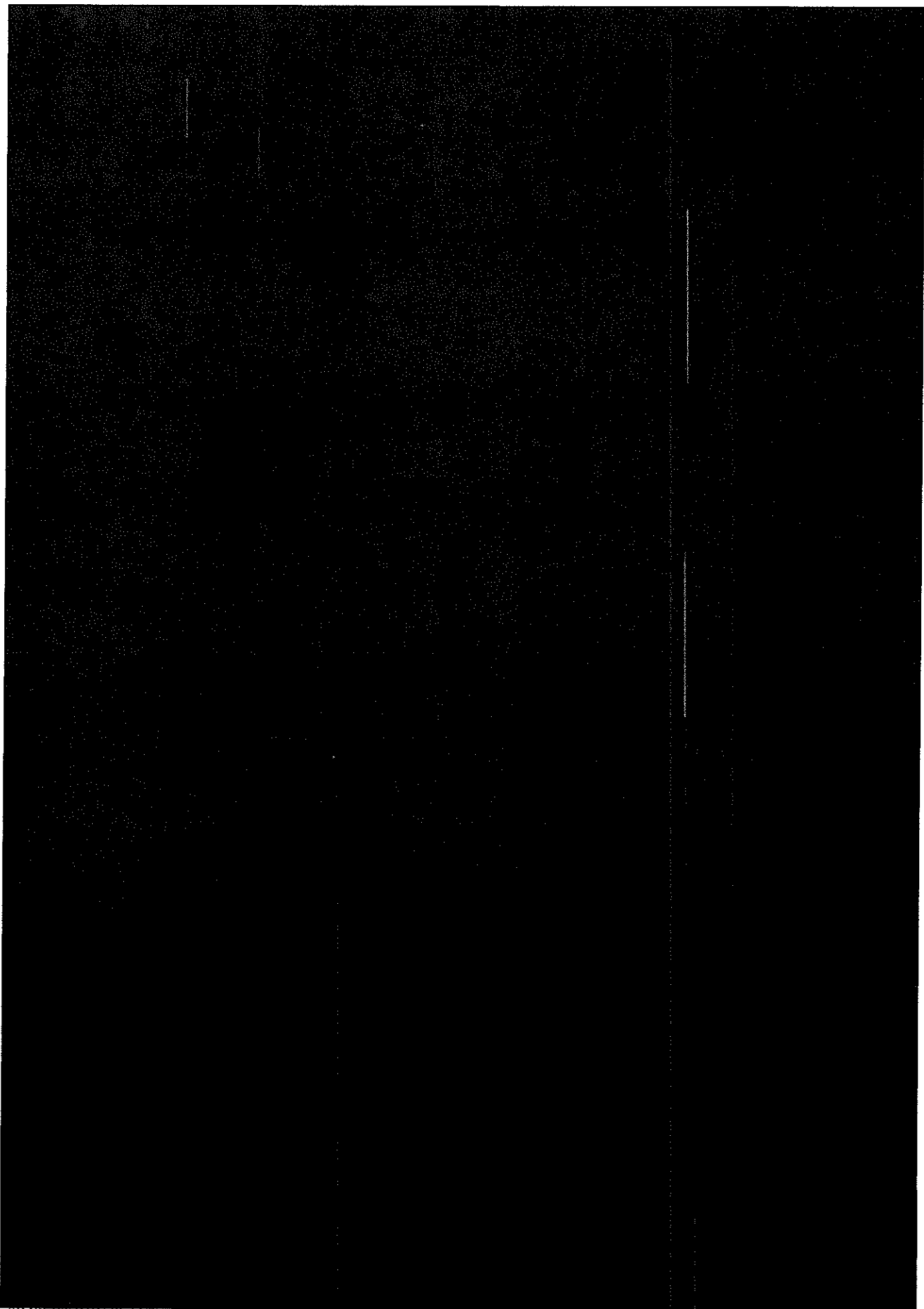
**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and  
Materials Consultants

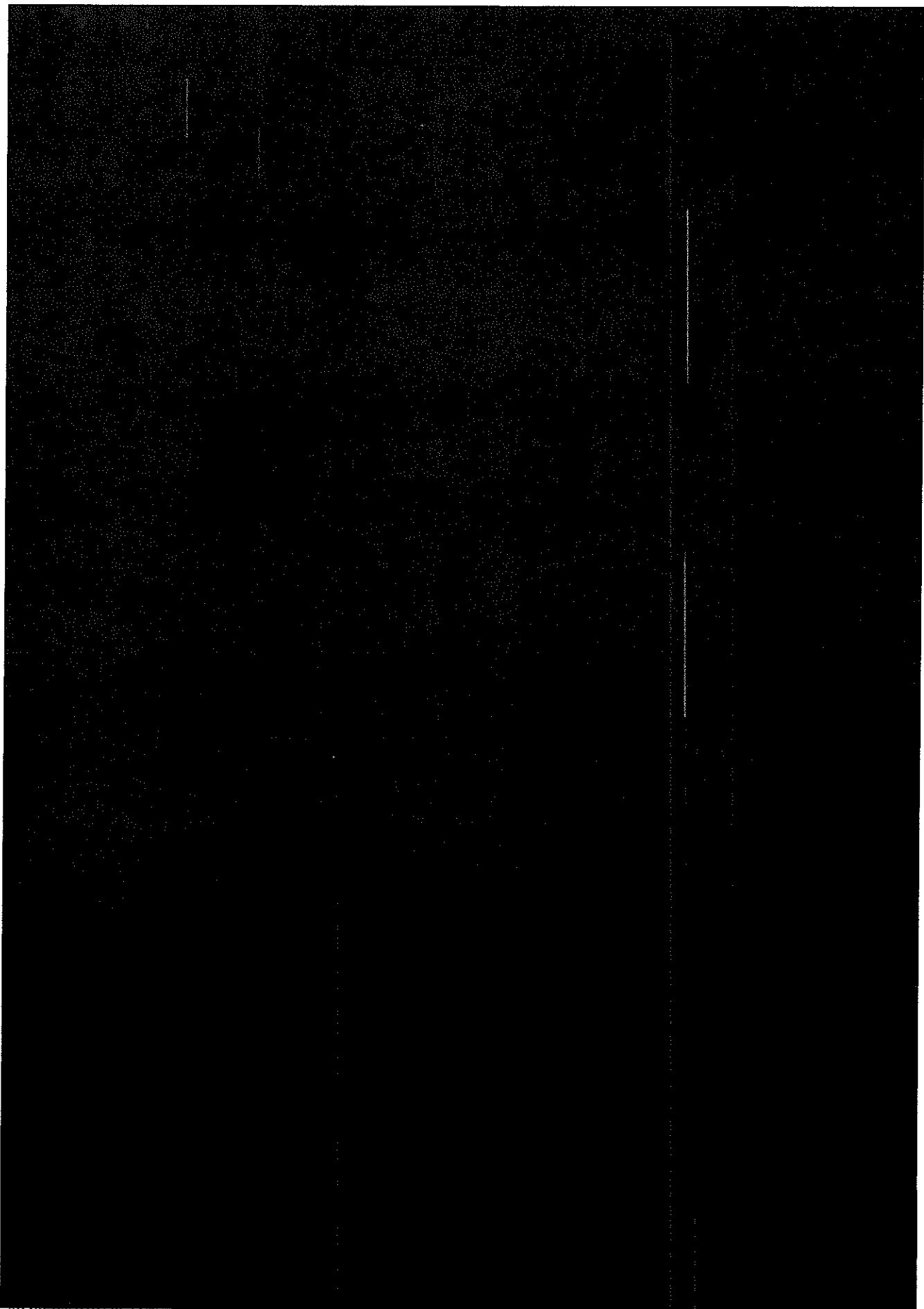
**CLOSURE COST ESTIMATES  
J.R. SIMPLOT COMPANY  
POCATELLO, IDAHO**

DRAWN BY:	SC	CHECKED BY:	LVC	DATE:	03/09/20
FILE NO.:	19-13-0079A	APPROVED BY:		FIGURE:	31

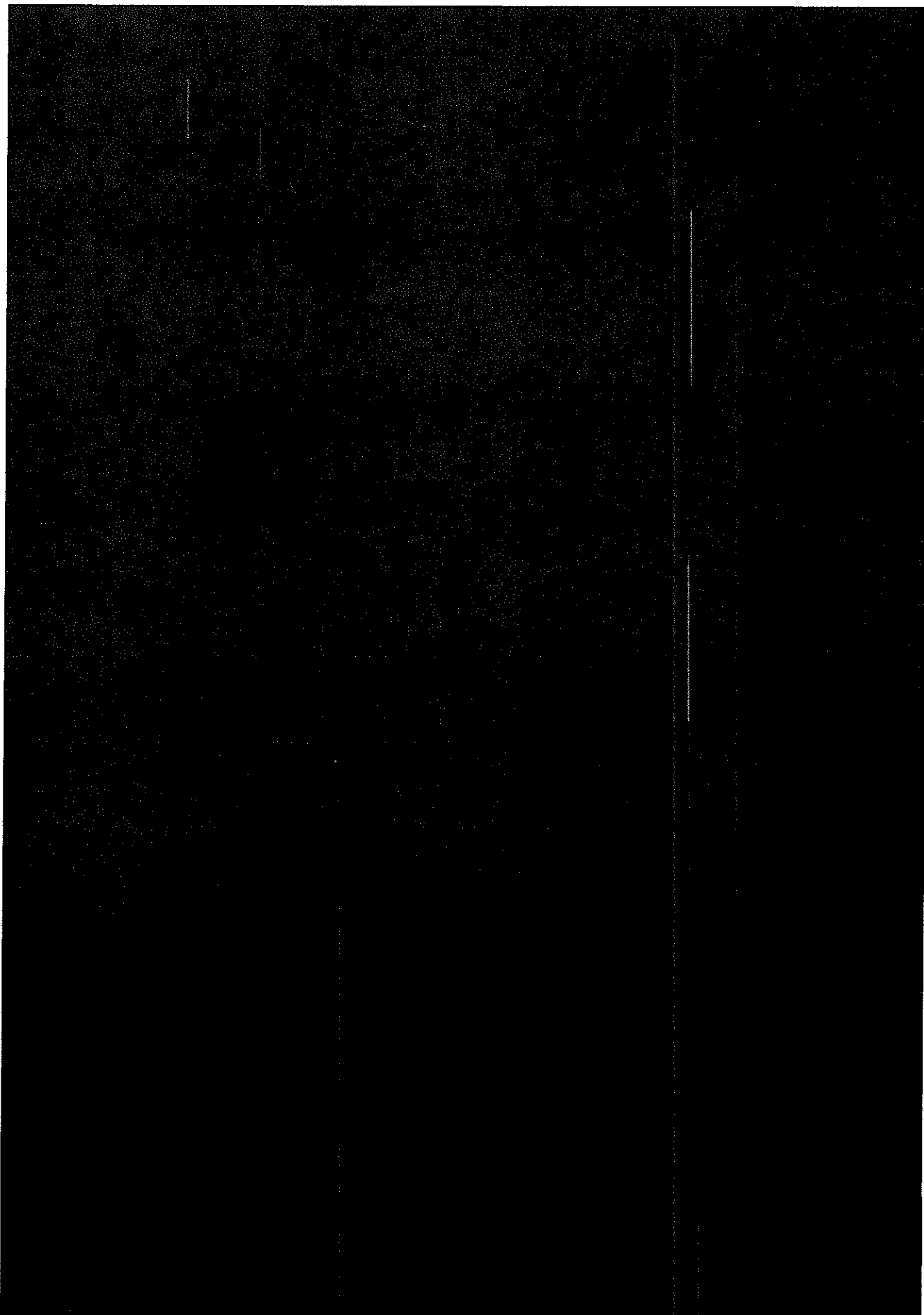


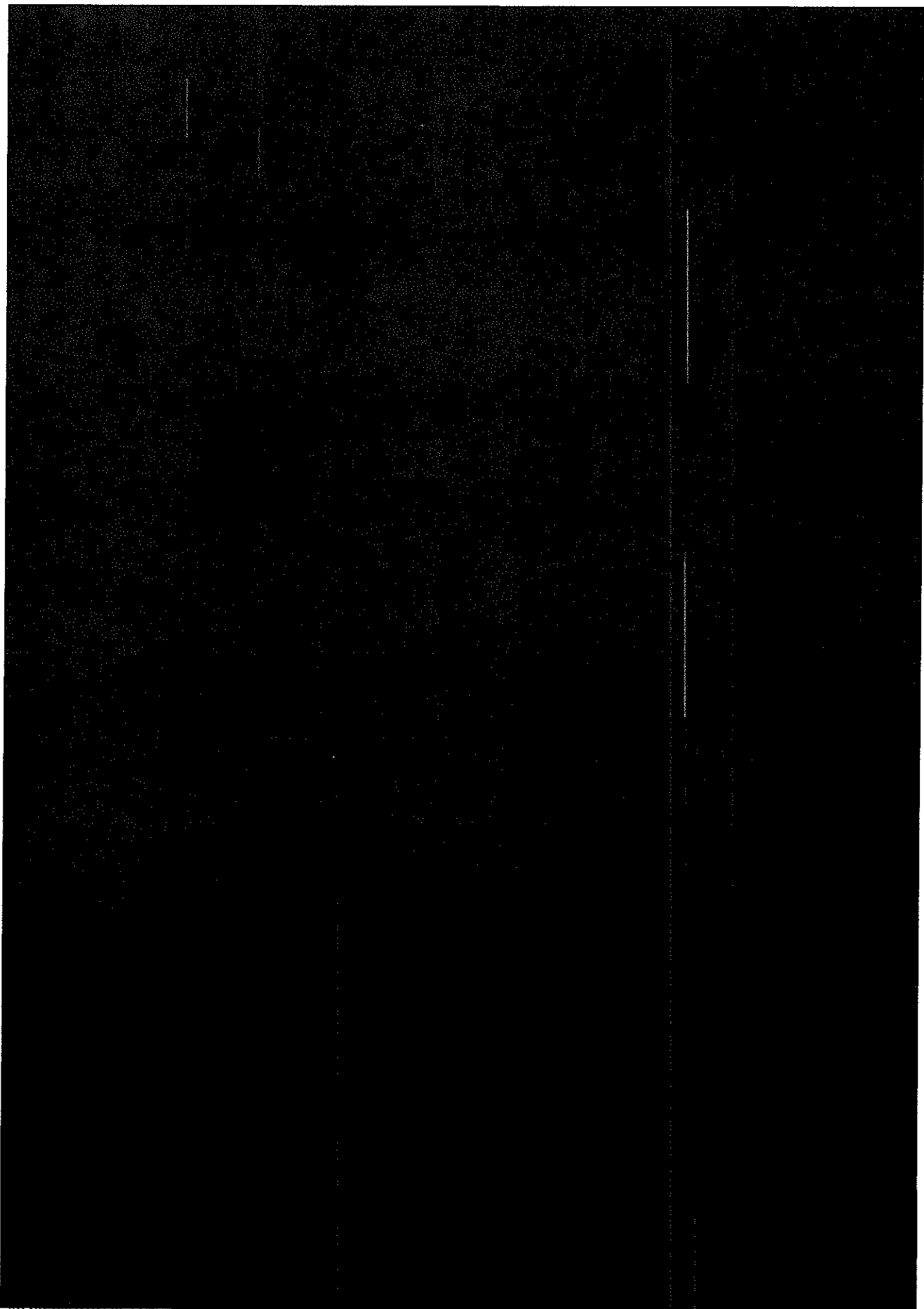






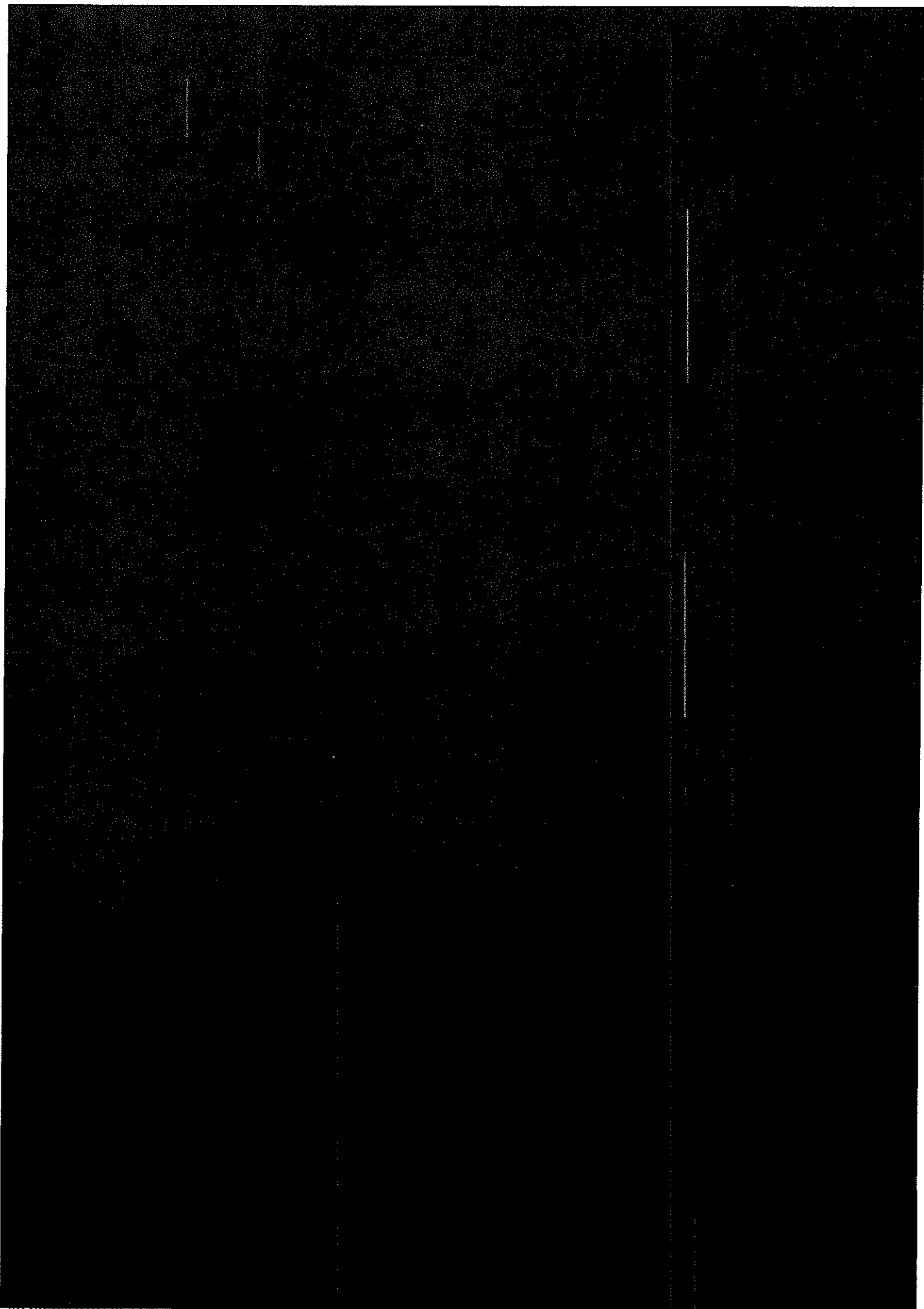


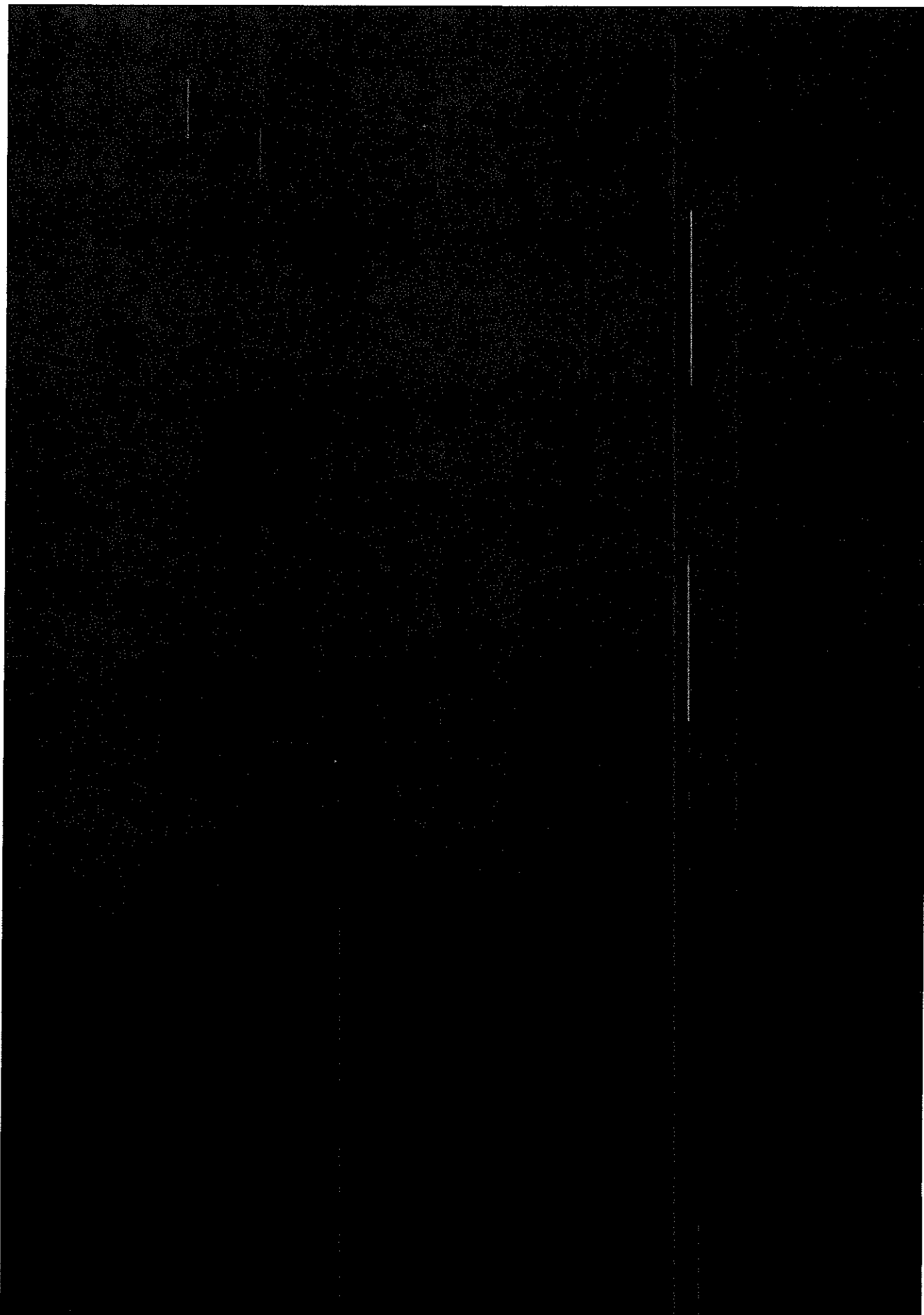


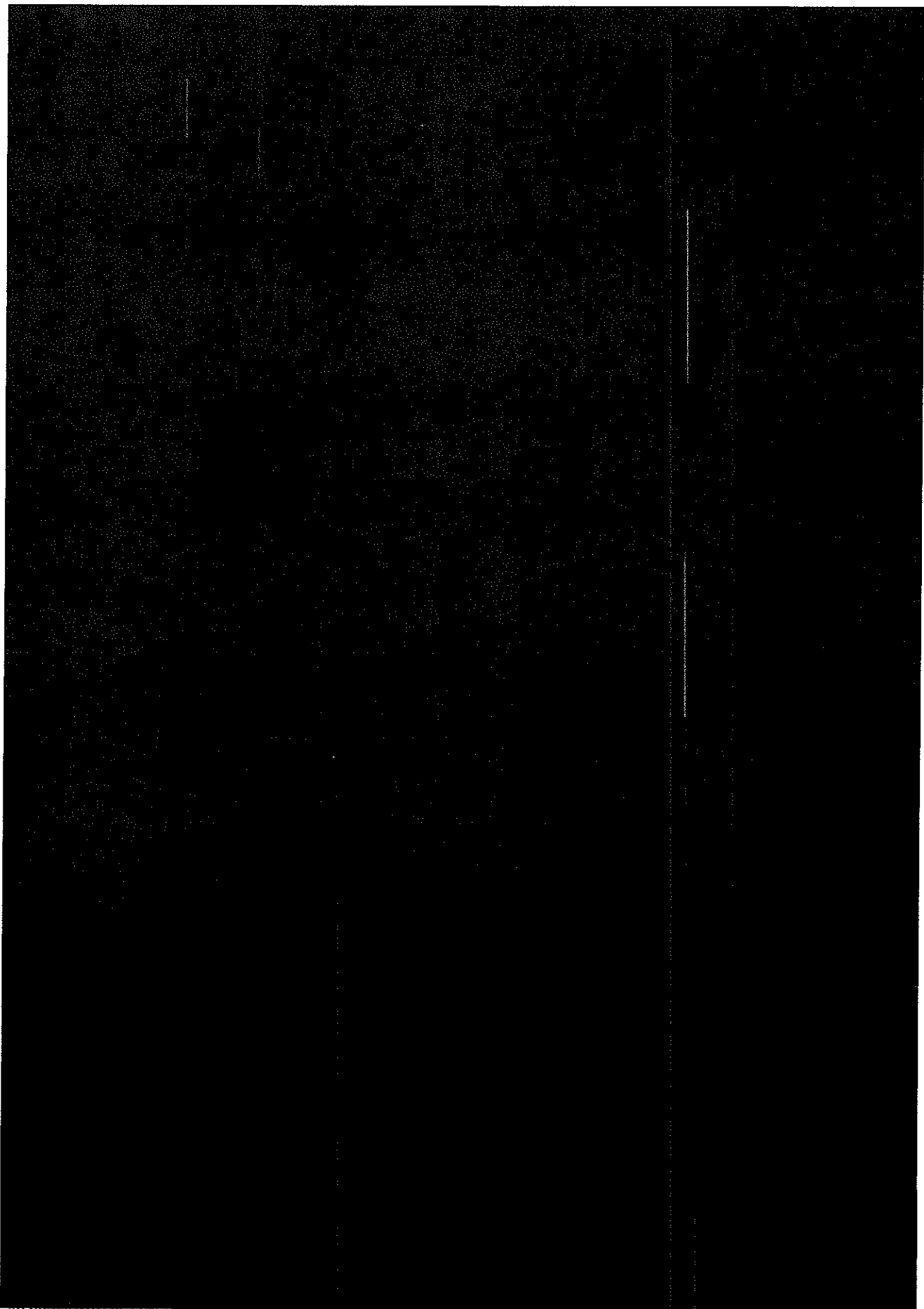


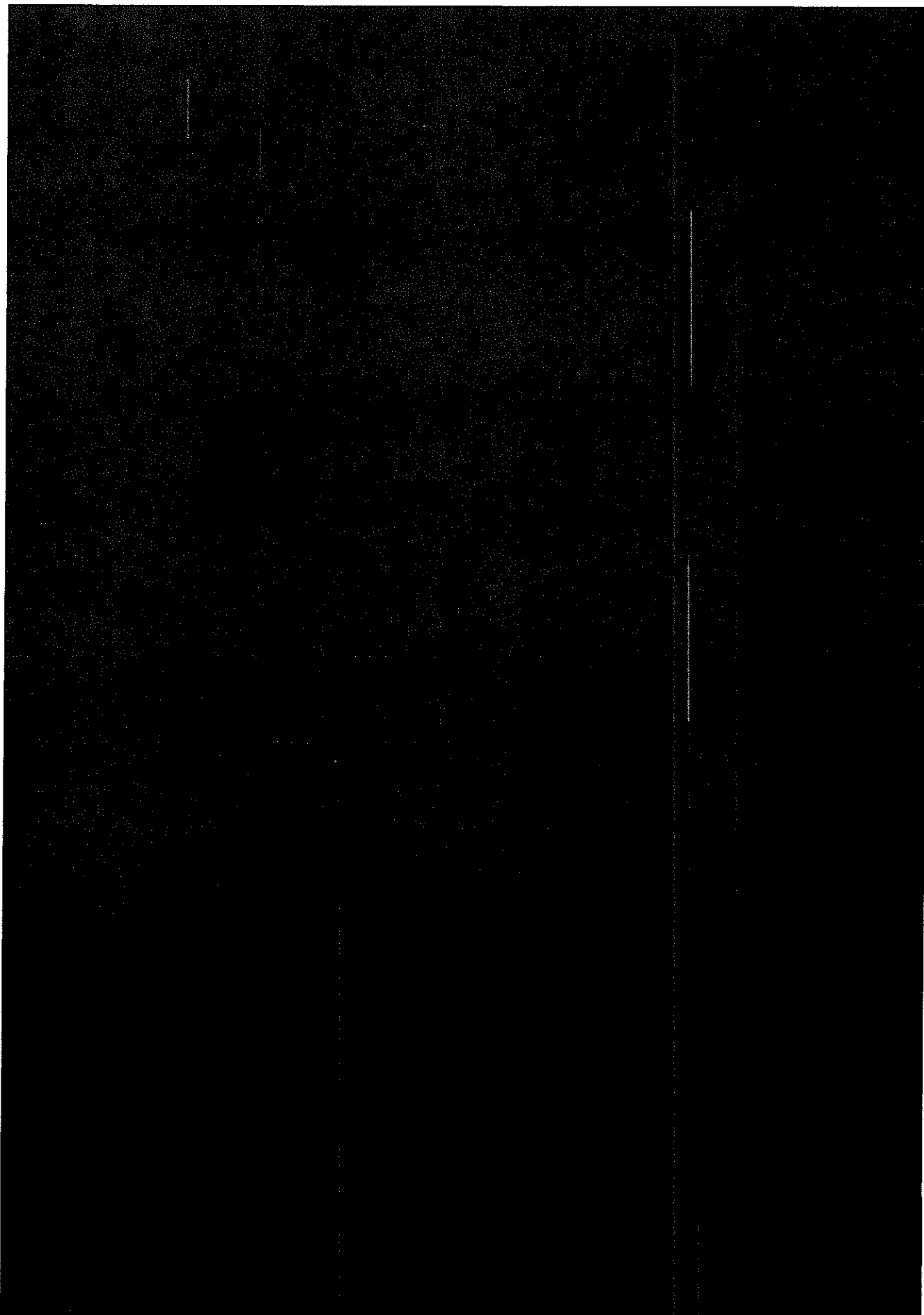
**Attachment 1**

**BASIS FOR 2018 UNIT CONSTRUCTION COSTS  
FOR PHOSPHOGYPSUM STACK SYSTEMS**









**Attachment 2**

**EXCERPT FROM THE  
U.S. DEPARTMENT OF COMMERCE  
BUREAU OF ECONOMIC ANALYSIS  
DATED MAY 28, 2020**



**Table 1.1.9. Implicit Price Deflators for Gross Domestic Product**

[Index numbers, 2012=100] Seasonally adjusted

Bureau of Economic Analysis

Last Revised on: May 28, 2020 - Next Release Date June 25, 2020

Line		2018				2019				2020
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
1	<b>Gross domestic product</b>	109.355	110.281	110.767	111.256	111.473	112.188	112.664	113.043	113.493
2	<b>Personal consumption expenditures</b>	107.396	107.984	108.408	108.768	108.875	109.518	109.923	110.297	110.646
3	<b>Goods</b>	95.229	95.401	95.32	94.983	94.591	94.956	94.773	94.679	94.46
4	Durable goods	88.019	87.633	87.375	87.122	87.05	86.661	86.39	85.689	85.334
5	Non-durable goods	99.015	99.507	99.528	99.144	98.568	99.37	99.24	99.508	99.369
6	<b>Services</b>	113.702	114.513	115.213	115.951	116.332	117.126	117.857	118.49	119.158
7	<b>Gross private domestic investment</b>	106.963	108.039	108.218	108.624	108.683	109.485	109.614	109.956	110.854
8	<b>Fixed investment</b>	107.59	108.381	108.947	109.092	109.573	110.106	110.422	110.654	111.011
9	Nonresidential	102.945	103.423	103.837	103.835	104.237	104.765	104.907	105.017	105.304
10	Structures	115.138	116.55	117.482	119.087	119.9	121.075	121.543	121.878	122.247
11	Equipment	97.116	97.32	97.708	97.434	97.667	97.762	97.485	97.543	97.7
12	Intellectual property products	103.154	103.434	103.56	102.986	103.38	104.125	104.64	104.702	105.107
13	Residential	128.04	130.22	131.472	132.292	133.132	133.679	134.805	135.593	136.258
14	Change in private inventories	---	---	---	---	---	---	---	---	---
15	<b>Net exports of goods and services</b>	---	---	---	---	---	---	---	---	---
16	<b>Exports</b>	98.123	99.363	99.642	99.287	98.666	99.466	98.879	98.476	97.67
17	Goods	92.233	93.579	93.795	93.125	92.185	92.723	91.778	91.412	90.069
18	Services	111.348	112.327	112.753	113.146	113.287	114.703	114.973	114.489	114.994
19	<b>Imports</b>	91.121	91.25	91.38	90.975	90.161	90.524	89.6	89.483	89.451
20	Goods	88.205	88.251	88.341	87.82	86.862	87.231	86.143	85.932	85.903
21	Services	106.355	106.932	107.287	107.511	107.461	107.796	107.732	108.096	108.049
22	<b>Government consumption expenditures and gross investment</b>	110.004	111.043	111.878	112.67	113.042	113.521	113.968	114.489	115.36
23	<b>Federal</b>	108.213	108.986	109.679	110.444	111.685	111.09	111.511	111.951	112.221
24	National defense	106.568	107.307	108.016	108.506	108.793	109.195	109.584	110.058	110.309
25	Nondefense	110.795	111.618	112.287	113.468	116.191	114.046	114.517	114.904	115.204
26	<b>State and local</b>	111.202	112.406	113.33	114.139	113.97	115.122	115.586	116.159	117.413
27	<b>Addendum:</b>									
	Gross national product	109.259	110.182	110.668	111.154	111.336	112.1	112.574	112.953	113.403

Actual Inflation From December 2018 to March 2020 = 2.0233 Percent

Average Inflation for Last Year of Data (1st Quarter 2019 to 1st Quarter 2020) = 1.8108 Percent

Projected Inflation from December 2018 to December 2020 = 3.4058

Inflation Factor = 1.03406

## Appendix 9

### Operational Practices for Air Emissions Control

Appendix 9  
Reclaim Cooling Towers  
Operational Practices for Air Emissions Controls  
Don Plant  
Final

November 4, 2022



**Reclaim Cooling Towers - Reclaim Cooling Towers  
Operational Practices for Air Emissions Control  
Simplot Don Plant**

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**Reclaim Cooling Towers - Reclaim Cooling Towers  
Operational Practices for Air Emissions Control  
Simplot Don Plant**

## **1. Introduction**

Simplot has developed Appendix 9: Reclaim Cooling Towers Operational Practices for Air Emissions Control to describe the Facility's current best operating practices including interim fluoride emissions reduction measures in place. Following the removal of the Reclaim Cooling Towers (or EPA approval of an Alternative Proposed Fluoride Reduction Plan under Paragraphs 32-33 of the Consent Decree), this Operational Practices for Air Emissions Control (Appendix 9) will no longer be in effect.

All capitalized terms and/or acronyms not otherwise defined in this Appendix shall have the meaning set forth in the Consent Decree.



## 2. Current Operating Practices

### 2.1 General

The Reclaim Cooling Towers are evaporative cooling towers. Evaporative cooling towers are open water recirculating devices that use fans or natural draft to draw or force ambient air through the device to remove heat from process water by direct contact.

Within the Phosphoric Acid Plant, the Reclaim Cooling Towers provide cooling for the phosphoric acid evaporators through a circulation of cooling water (including evaporator condensates) that directly contacts with process vapors in the evaporator barometric condensers. The process vapors add fluoride compounds to the circulating cooling water. Fluoride emissions from the Reclaim Cooling Towers are measured periodically. The testing requirements and fluoride emissions limits are documented in the Tier I Operation Permit No. T1-2017.0024 issued by the Idaho Department of Environmental Quality (IDEQ).

When the Reclaim Cooling circuit water level is low, make-up water is supplied to the cooling water supply basin. This make-up water is limited to either fresh well water or groundwater extraction well water.

### 2.2 Cooling Tower Fan Speeds

A major operational control feature of the cooling towers is the fan speed. The fans provide the air flow to provide the heat transfer from the condensates to ambient air. All of the fans of the Reclaim Cooling Towers are equipped with variable frequency drives that allow modulation of the fan speed. The Reclaim Cooling Tower fans are typically set at 90-100%. However, in the event a source (stack) test does not demonstrate compliance with the fluoride emission limit, the fan speed will be reduced to 85% and additional fluoride emission testing conducted.<sup>1</sup> The fan will then be operated at a reduced fan speed where compliance with the fluoride emission limit is demonstrated. The fan speed will not be increased until compliance with the fluoride emission limit can be demonstrated at that higher fan speed.

The following scenario demonstrates the procedures followed to set fan speed in the event a stack test does not demonstrate compliance.

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<sup>1</sup> Historical operating data has shown that a fan speed of 85% results in a reduction of fluoride emissions.



**Reclaim Cooling Towers - Reclaim Cooling Towers  
Operational Practices for Air Emissions Control  
Simplot Don Plant**

1. Stack test on Cell "A" is conducted at normal (e.g., 90-100%) fan speed
  - a. Results from the stack testing contractor (typically 2-6 weeks after sampling) does not demonstrate compliance with emission limit:
    - i. Fan speed is reduced to 85% upon receipt of result;
    - ii. Cooling tower cell is evaluated for any maintenance needs or other factors that might have contributed to a potential increase in emissions; and
    - iii. Stack test scheduled to demonstrate compliance at reduced fan speed of 85%.
  - b. If the stack test demonstrates compliance, then the fan speed will be maintained at 85%.

The following scenario outlines the procedures to be followed to increase fan speed after it has been reduced.

2. Stack test on Cell "A" is rescheduled at increased or normal (e.g. 90-100%) fan speed.
  - a. Second stack test on Cell "A" conducted at increased or normal fan speed:
    - i. Fan speed increased on the day of the test;
    - ii. Retest conducted at increased fan speed; and
    - iii. Fan speed returned to the reduced operating speed (typically 85%) immediately after completing the test.
  - b. If the retest at increased or normal (e.g. 90-100%) fan speed demonstrates compliance with emission limit, then:
    - i. After submittal of retest results to DEQ, fan speed is set at the normal or operating speed which is equal to, or lower than the successful retest.
  - c. If the retest at increased or normal fan speed does not demonstrate compliance with emission limit, then:
    - i. Fan speed remains at reduced speed (normally 85%).

### 2.3 Cooling Tower Operations & Scrubber Blowdown Routing

Scrubber blowdown streams are combined with the Process Wastewater from the Phosphoric Acid Plant, which (together) goes to the phosphogypsum stack. Decant process wastewater from the phosphogypsum stack is recycled back into the phosphoric acid process. A portion of the fluoride from the scrubber blowdown that goes to the Phosphogypsum Stack is routed to the Reclaim Cooling Towers only after being recycled back into the production process.



### 2.3.1 Typical Operation

The scrubbers that contribute scrubber blowdown to the Process Wastewater are the phosphoric acid digester scrubber, phosphoric acid belt filter scrubber, phosphoric acid tank farm scrubber, super phosphoric acid primary control scrubber, fluorine scrubber, super phosphoric acid extended absorber system, animal feed deflo scrubber, and animal feed Entoleter scrubber. The phosphoric acid and super phosphoric acid scrubber blowdowns flow into the blend system before being utilized to either fluidize the phosphogypsum going to the Phosphogypsum Stack System or as filter wash water on the phosphoric acid belt filters. The filter wash water is then recycled back to the phosphoric acid digester and incorporated into the phosphoric acid being produced. The animal feed scrubber blowdowns are used to fluidize the phosphogypsum going to the Phosphogypsum Stack System.

### 2.3.2 Evaporator Wash Operation

Another process stream that currently goes to the Reclaim Cooling Towers is evaporator wash water. Prior to completion of the compliance projects set forth in Appendix 6 to the Consent Decree, evaporator wash water is sent from the evaporator barometric condensers to the Reclaim Cooling Towers. The evaporator wash water is supplied by the #1 Wash Water Tank, which is an existing portion of the Acid Value Recovery System and currently receives inputs shown in Diagram 2 of the Facility Report.<sup>2</sup> Following completion of the compliance projects set forth in Appendix 6 to the Consent Decree, evaporator wash water will be supplied and recirculated back to the Acid Value Recovery System.

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<sup>2</sup> Prior to completion of the compliance projects set forth in Appendix 6 to the Consent Decree, Diagram 2 of the Facility Report is not an accurate depiction of the effluent destinations of the existing portions of the Acid Value Recovery System. See Section 1.4 of the Consolidated Materials Management Practices document for further details.





## 2.4 Blend System

Simplot implemented the blend system in October 2016 to reduce the fluoride emissions from the Reclaim Cooling Towers. The blend system removed the phosphoric acid digester flash coolers from the Reclaim Cooling Tower circuit and re-directed this cooling and fluoride load directly to the Phosphogypsum Stack System.

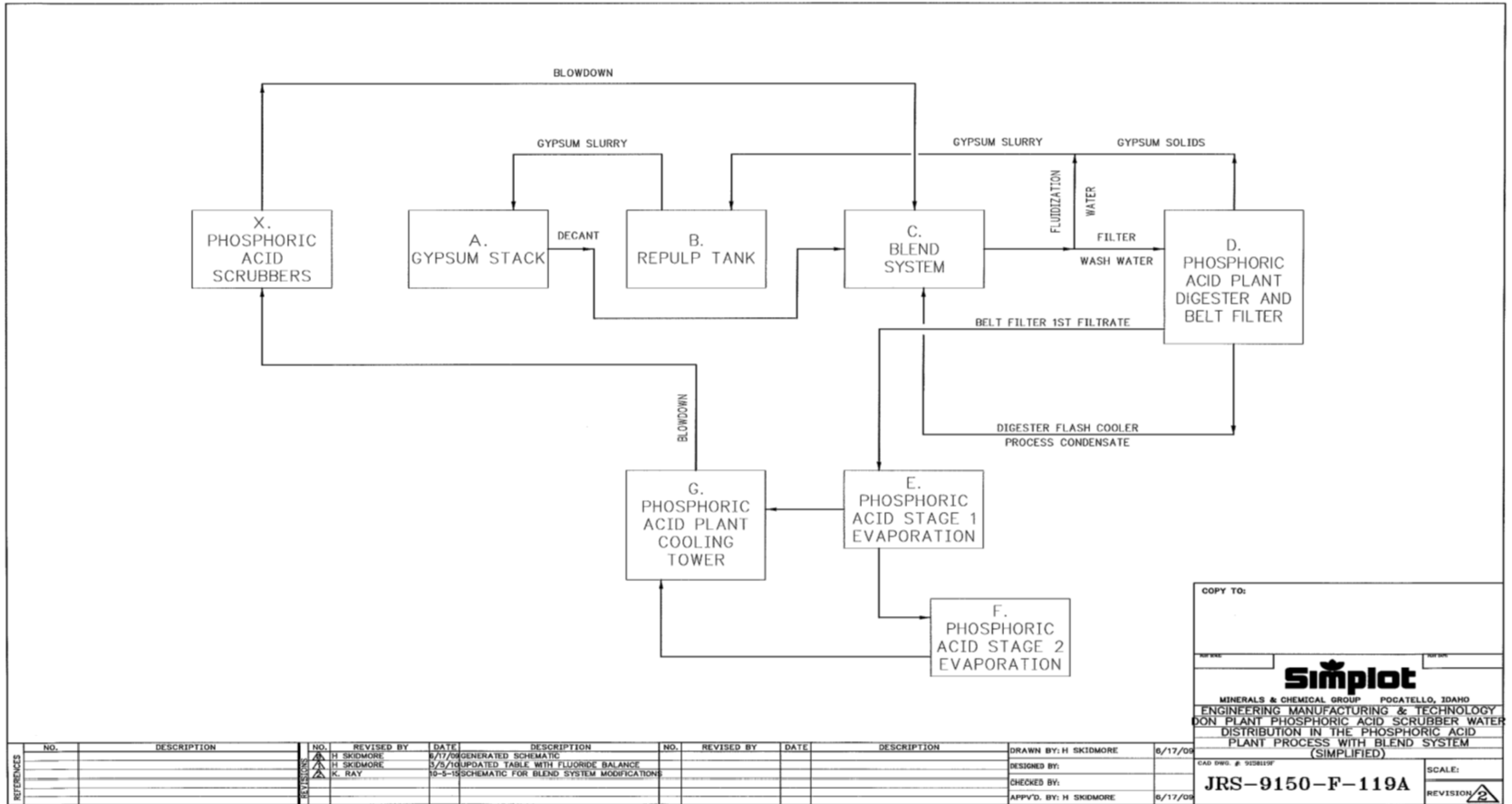
The blend system enables a reduction in fluoride emissions in several ways. First, with the reduced heat load to the Reclaim Cooling Towers, the facility is currently targeting an annual average of two cooling tower cell fans idled.<sup>3</sup> Second, by reducing the heat load to the Reclaim Cooling Towers, the temperature of the water entering the cooling system is reduced, thus lowering the vapor pressures (and emissions) of volatile fluoride compounds. Furthermore, some of the fluoride in the flash cooler streams (that are sent to the gypsum stack) reacts with or is absorbed into the calcium sulfate (gypsum) crystal structure rather than being emitted into the atmosphere.<sup>4</sup> Finally, the blend system also reduces the amount of potential scrubber blowdown water flowing to the Reclaim Cooling Towers.

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<sup>3</sup> Utilizing the motor run status tags from the facility's process control system (i.e., the Distributive Control System - DCS) averaged over a day (midnight to midnight), the number of fans idled each day is calculated and is then averaged for the calendar year. The data collected so far shows a reduction of cooling tower cell operation of 1-1.3 "cells" annually.

<sup>4</sup> Precipitation reactions in the gypsum pond system include sodium and potassium fluosilicates, fluoroaluminates, chukrovite, and calcium fluoride. The net result of complexation and precipitation is a reduction in free fluoride concentration, which is the primary source of fluoride emissions.

Figure 1: Post-Blend System Phosphoric Scrubbers Distribution Process Drawing





**Reclaim Cooling Towers - Reclaim Cooling Towers  
Operational Practices for Air Emissions Control  
Simplot Don Plant**

## Appendix 10

### Additional Definitions of Terms Used in Appendices

**APPENDIX 10**

**ADDITIONAL DEFINITIONS OF TERMS USED IN APPENDICES**

For Appendices 1-9 and 11, any capitalized terms not otherwise defined in the individual appendices shall have the meanings set forth in the Consent Decree or as provided in this Appendix 10.

“Active” means a Phosphogypsum Stack/System that currently receives Phosphogypsum and/or Process Wastewater from an operating phosphoric acid production facility.

“Auxiliary Holding Pond (AHP)” or Overflow Pond means a lined storage pond, designated by the operator and approved by the State and/or EPA, typically used to hold untreated Process Wastewater. AHPs are intended to increase system storage above that otherwise provided by the Return or Decant Pond(s) and are typically located within the footprint of a Phosphogypsum Stack System.

“(Natural) Background” means the level of any constituent in the ground water within a specified area as determined by representative measurements of the ground water quality unaffected by human activities, as defined in Idaho Administrative Code, Chapter 58, Section 01.11.007.

“Component” includes any AHP(s), overflow pond, lime treatment solids ponds, Dikes, Toe drainage swales, Process Wastewater and Leachate channels or ditches, other Process Wastewater collection or conveyance systems associated with a Phosphogypsum Stack, cooling ponds, or Return or Decant Ponds.

“Dike” means a barrier to the flow of Phosphogypsum and Process Wastewater which is constructed of naturally occurring soil (Earthen Dike) or of Phosphogypsum (Gypsum Dike) and which is a Component of a Phosphogypsum Stack System.

“Drain” means a material more pervious than the surrounding fill which allows seepage water to drain freely while preventing Piping or internal erosion of the fill material.

“Earthen Dike” means a barrier to the flow of Phosphogypsum and Process Wastewater which is constructed of naturally occurring soil and which is a Component of a Phosphogypsum Stack System.

“Emergency Diversion Impoundment (EDI)” means a storage area, typically located outside the footprint of a Phosphogypsum Stack System, designated in the Facility’s site-specific water management plan to be used on a temporary basis when necessary to avoid an unpermitted Surface Water discharge resulting from Dike overtopping or other imminent and substantial endangerment identified in Appendix 1.D.

“Evaporation Pond” means impounded areas that provide for the evaporation of Process Wastewater and Leachate or treated Process Wastewater and Leachate.

“Final Cover” means the materials used to cover the top and sides of any Component of the Phosphogypsum Stack System upon closure in accordance with Appendix 1.C.

“Freeboard” means the distance between the liquid level in an impoundment and the liquid level which would result in the release of stored liquid from the impoundment.

“Geomembrane” means a low-permeability synthetic membrane used as an integral part of a Phosphogypsum Stack System designed to limit the movement of liquid or gas in the Phosphogypsum Stack System.

“Groundwater” means any water of the state which occurs beneath the surface of the earth in a saturated geological formation of rock or soil as defined in Idaho Administrative Code, Chapter 58, Section 01.11.007.

“Groundwater Table” means the upper surface of a zone of saturation, where the body of Groundwater is not confined by an overlying impermeable zone.

“Gypsum Dike” means the outermost Dike constructed from Phosphogypsum within the perimeter formed by a Starter Dike for the purpose of raising a Phosphogypsum Stack and impounding Phosphogypsum and/or Process Wastewater. This term specifically excludes any Dike inboard of a rim ditch, any partitions separating Phosphogypsum Stack compartments, or any temporary windrows placed on the Gypsum Dike.

“Inactive” means a Phosphogypsum Stack, Phosphogypsum Stack System or Component that has not undergone Stack Closure and is no longer receiving Phosphogypsum and/or Process Wastewater.

“Initial Closure Plan” means the preliminary closure plan prepared in accordance with Appendix 1.C and incorporated in Appendix 8 that includes Phosphogypsum Stack System Closure design elements needed to generate a Cost Estimate in accordance with Appendix 2.

“Lateral Expansion” means the horizontal expansion of Phosphogypsum or Process Wastewater storage capacity beyond the permitted capacity (where applicable) or design dimensions (i.e. footprint) of the Phosphogypsum Stack, or Return or Decant Ponds, and perimeter drainage conveyances at an existing Facility. Any Phosphogypsum Stack, Return or Decant Pond(s), or perimeter drainage conveyance which is constructed within 2000 feet of an existing Phosphogypsum Stack System, measured from the edge of the expansion nearest to the edge of the footprint of the existing Phosphogypsum Stack System, is considered a Lateral Expansion. A fully enclosed building, container, tank or Emergency Diversion Impoundment does not constitute a Lateral Expansion. 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.”

“Liner” means a continuous layer of low permeability natural or synthetic materials which controls the downward and lateral escape of waste constituents or Leachate from a Phosphogypsum Stack System.

“Log” means a record maintained by the Facility that contains a schedule of inspections of Phosphogypsum Stack System or Component, the findings of such inspections, and any remedial measures taken in response to such findings.

“Long-Term Care” means the period following Stack Closure during which long-term care activities are undertaken in accordance with the requirements in Appendix 1.C.

“Maximum Design Level” means the engineer-certified maximum water elevation that an impoundment is designed to contain, as determined using generally accepted good engineering practices with appropriate factors of safety.

“New Perimeter Dike” means a Perimeter Dike that is completed after the Effective Date.

“Perimeter Dike” means the outermost Earthen Dike surrounding a Phosphogypsum Stack System that has not been closed or any other Earthen Dike, the failure of which could cause a release of Process Wastewater outside the Phosphogypsum Stack System. In the case of a vertical expansion, the HDPE lined outermost Dike shall also be considered a Perimeter Dike, even if it is a constructed with Phosphogypsum, if its failure could cause a release of Process Wastewater outside the Phosphogypsum Stack System.

“Permanent Phosphogypsum Stack System Closure Plan” or “Permanent Closure Plan” means the plan for Stack Closure and Long-Term Care submitted at or prior to closure and prepared in accordance with the requirements of Appendix 1.C.

“Phosphogypsum Stack System Closure<sup>1</sup>” means the cessation of operation of a Phosphogypsum Stack, Phosphogypsum Stack System, or Component thereof and the acts of securing and closing such a system, in accordance with the Permanent Closure Plan so that it will pose no significant threat to human health or the environment. This includes Stack Closure, Long-Term Care and the water management activities associated with Stack Closure and Long-Term Care.

“Piping” means progressive erosion of soil or solid material within the dam or Dike, starting downstream and working upstream, creating a tunnel into the dam or Dike. Piping occurs when the velocity of the flow of seepage water is sufficient for the water to transport material from the embankment.

“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.

“Return or Decant Pond” means impounded areas within the Phosphogypsum Stack System, excluding settling compartments atop the Phosphogypsum Stack, that provide capacity for the

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<sup>1</sup> The Permanent Phosphogypsum Stack Closure period begins on Day 1 of Stack Closure and runs through the Long-Term Care period, generally a minimum of 50 years.

cooling, storage and reuse or recirculation of phosphoric acid Process Wastewater, Phosphogypsum Stack Leachate or runoff from the Phosphogypsum Stack.

“Soil Liner” means a Liner constructed from naturally occurring earthen material. This definition expressly excludes any Liner constructed of synthetic material or Phosphogypsum.

“Stack Closure” means when a Phosphogypsum Stack, Phosphogypsum Stack System, Component thereof, or an EDI ceases to accept Phosphogypsum, Process Wastewater, Phosphogypsum System Leachate or collection waters. In addition, actions are undertaken to secure and close the Phosphogypsum Stack, Phosphogypsum Stack System, Component thereof, or EDI in Phosphogypsum Stack System closing, Long-Term care (e.g., monitoring and maintenance) and water management activities associated with Phosphogypsum Stack System closing and Long-Term care activities.

“Starter Dike” means the initial Dike constructed at the base of a Phosphogypsum Stack to begin the process of storing Phosphogypsum.

“Waters of the State” or “Surface Water” means all the accumulations of water, surface and underground, natural and artificial, public and private, or parts thereof which are wholly or partially within, which flow through or border upon the state as defined in IDAPA 58.01.02.10, Department of Environmental Quality, Water Quality Standards.

“Temporary Deactivation” means a Phosphogypsum Stack System that will cease or has ceased to accept deposits of Phosphogypsum and/or Process Wastewater on a temporary basis and for which a request has been made in writing to, and approved by, the State of Idaho and/or the EPA in accordance with the requirements in Appendix 1.C.

“Third-Party Engineer” means an engineer who is not an employee of any entity that owns or operates a phosphate mine or Facility.

“Toe” means the junction between the face of the Dike and the adjacent terrain.

“Toe Drain” is a wedge-shaped Drain supporting the downstream Toe of the dam.

“Wave Height” means the average height of the waves that are used for design purposes as a function of sustained wind speed, effective fetch length<sup>2</sup>, and wind duration.

“Wave Run-up” means the difference in vertical height between the maximum elevation attained by wave run up or uprush on a slope and the still water elevation at the inboard Toe of the slope.

“Wind Surge” means the vertical rise in base water-surface elevation, exclusive of the Wave Height, above the still water elevation, caused by wind-induced stresses and mounding of the water surface in the leeward direction.

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<sup>2</sup> Maximum fetch refers to the maximum unobstructed distance across a free liquid surface over which wind can act (typically the diagonal measurement across an impoundment).



## Appendix 11

### Environmental Mitigation



Appendix 11  
Mitigation Project Summary  
Don Plant  
Technical Report No. 91a

November 4, 2022



# Mitigation Project Summary

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As environmental mitigation, Simplot has offered to provide \$200,000 that will be utilized to fund water quality improvement projects in the Portneuf River. These funds will be issued to and disbursed by the Idaho Department of Environmental Quality (Idaho DEQ).

The lower Portneuf River has seen heavy disturbance since the early 1900s because of urban development as well as from the development of heavy industry in the mid-1900s with the establishment of phosphate ore processing in the area. Contaminants from these facilities, especially from the former unlined Phosphogypsum Stack, have resulted in water quality and habitat degradation in the Portneuf River. Two invasive species, Black willow (also known as Crack willow) and Russian olive trees, have become well established in riparian areas and have crowded out the native hardwood (Black cottonwood). Due to the fast growth pattern of both invasive species, they are unstable and are susceptible to disease, weather damage, and drought conditions. This results in trees which die and fall over at a high rate of frequency, damaging the riverbanks, undercutting bank stability, and causing clogged or damaging flow patterns within the river. The resulting bank erosion contributes large volumes of sediment into the river, which is one of Idaho's largest water quality issues.

Furthermore, these two tree species have succeeded so well they have almost excluded all other woody plants in this area. The lack of diversity in the riparian vegetation contributes strongly to reduced aquatic organism communities. A diverse aquatic community is essential to creating a healthy ecosystem thus leading to better water quality. By removing the invasive species and replanting with a diverse native riparian vegetation community the water quality of the Portneuf River will be directly improved.

Similar work has been undertaken previously in some small areas of the Portneuf River, however, the funding provided by Simplot will allow for a much more extensive and focused effort which should provide a large-spread positive ecosystem effect.

Mitigation Project Summary

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Photos 1 and 2: Previous invasive tree removal work in the Portneuf River provided as reference.

The mitigation funds provided by Simplot will be utilized to remove these invasive trees and replant the areas with native vegetation in up to three areas (the City of Pocatello- Portneuf River Project identified in Figures 1 and 2; the Shoshone-Bannock Tribal Project- Papoose Spring Project identified in Figures 1 and 3; and the Shoshone-Bannock Tribal Project- The Bottoms identified in Figures 1 and 4), each with a separate responsible entity. The Shoshone Bannock Tribes will be responsible for implementing the mitigation work that is within the boundaries of the Fort Hall Reservation; the City of Pocatello will be responsible for implementing the mitigation work along the Portneuf River outside the boundaries of the Fort Hall Reservation.

Although unlikely, if the work identified is completed and funds remain available Idaho DEQ will work with these partners to identify additional areas throughout the watershed that are appropriate for invasive vegetation removal and native planting.

Funds will be managed by the Idaho DEQ utilizing the following general protocols:

- Once funds are received by Idaho DEQ from Simplot, a tracking system will be put into place within Idaho DEQ's financial management system. This will include separate tracking codes for these funds.
- Contracts will be developed between Idaho DEQ and both the City of Pocatello and the Shoshone Bannock Tribes to allocate these funds for these projects. The contracts will include a scope of work, work schedule and billing procedures for the parties.

Once funding is issued, implementation of these projects will be the responsibility of each of these entities in accordance with their contracts. The Water Quality Manager at Idaho DEQ's

## Mitigation Project Summary

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Pocatello Regional Office will provide oversight of the project work and will also be available for consultation throughout the project.

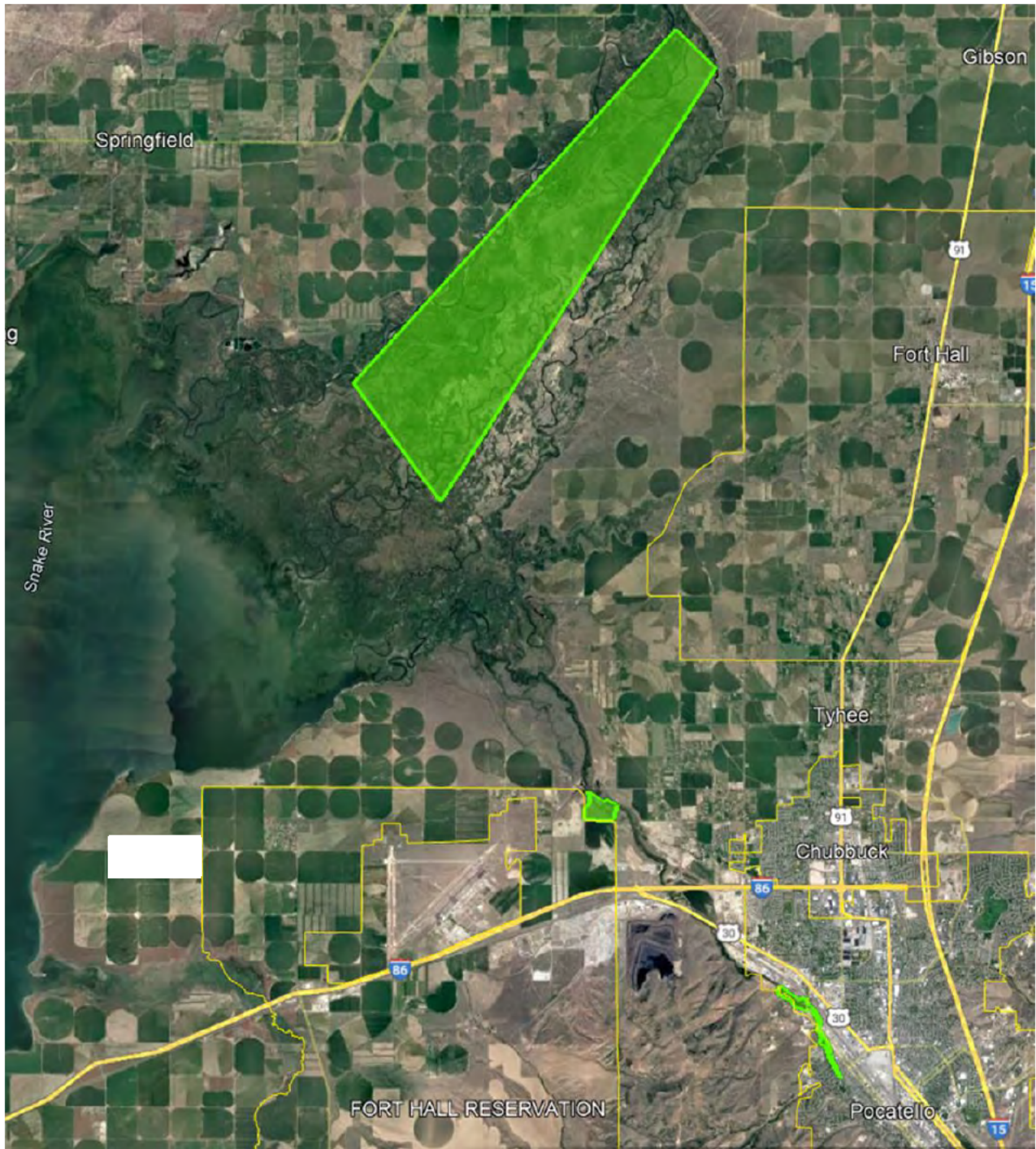
After the funds are received by Idaho DEQ, it may take up to one year of planning lead time prior to work being conducted on the ground. The implementation of the work is anticipated to take up to two field seasons for tree removal and plantings, with an additional two field season to ensure native plantings are successful with possible additional plantings taking place when necessary. The total project work may take up to five years to fully complete. Project milestone dates therefore are as follows:

<u>Project Milestone</u>	<u>Completion Deadline</u>
Provision of Funding	30 days after entry of Consent Decree
Completion of Project Planning	12 months after provision of funding
Initial Project Implementation	24 months after completion of project planning
Assessment/Additional Planting (if needed)	24 months after completion of initial project implementation
Mitigation Project Summary	3 months after completion of assessment/any additional planting
Final Report to EPA/DOJ	1 month after Simplot receives project summary

Idaho DEQ will provide a completion report to Simplot at the end of the work described in this Mitigation Project Summary, identifying the areas in which tree removal and plantings were completed, a summary of fund expenditures, and any other relevant information. Simplot is required by the Consent Decree to submit a Mitigation Completion Report to EPA at the end of this project detailing the work that has been performed, and certifying to the work's completion, pursuant to this Mitigation Project Summary.

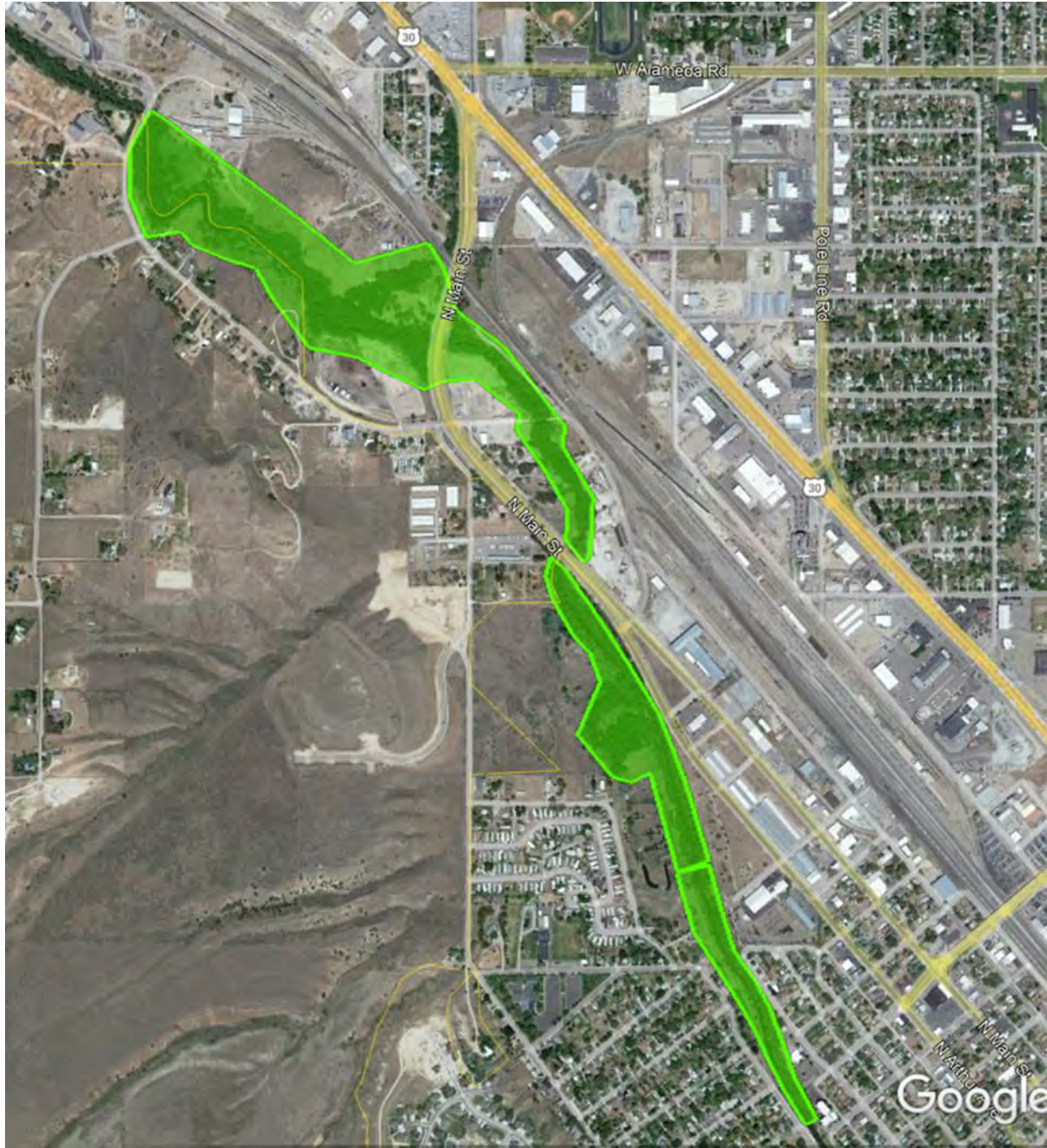
Mitigation Project Summary

Figure 1. Overall map view of the invasive tree species removal and native revegetation projects.



Mitigation Project Summary

Figure 2. City of Pocatello- Portneuf Project Area.



Mitigation Project Summary

Figure 3. Shoshone-Bannock Tribal Project- Papoose Spring (Waterwheel property) Project.





Mitigation Project Summary

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Figure 4. Shoshone-Bannock Tribal Project- The Bottoms.

