## AGENDA

## SPECIAL JOINT MEETING of the SALINA PUBLIC ENTITIES including CITY OF SALINA Board of Commissioners SALINA USD 305 Board of Education SALINA AIRPORT AUTHORITY Board of Directors and representatives of KANSAS STATE UNIVERSITY Regarding FORMER SCHILLING AIR FORCE BASE ENVIRONMENTAL MATTER

## Tony's Pizza Event Center, Heritage Hall 800 The Midway, Salina, KS June 24, 2020 – 1:30 PM to 3:00 PM

#### 1. Calls to Order

- <u>City of Salina</u>. Call to order; confirm quorum and public notice. (Mayor Mike Hoppock)
- <u>USD 305</u>. Call to order; confirm quorum and public notice. (President Ann Zimmerman)
- <u>Salina Airport Authority</u>. Call to order; confirm quorum and public notice. (Chairman Eichelberger)
- <u>Kansas State University</u>. Introduction of representatives. (Cindy Bontrager, VP and COO)

## 2. Introductions

• Introduction of Salina Public Entities staff, legal representation, and environmental consultants. (*Tim Rogers, Executive Director, Salina Airport Authority*)

Mike Schrage, City Manager, City of Salina Linn Exline, Superintendent, USD 305 Alysia Starkey, CEO & Dean, Kansas State University Polytechnic Eryn Wright, Legal Counsel, USD 305 Greg Bengtson, Legal Counsel, City of Salina and Salina Airport Authority Aaron Good, Associate General Counsel, Kansas State University Andy Davis, Special Environmental Attorney, Stinson LLP Martha Tasker, Director of Utilities, City of Salina Matthew Schroeder, Senior Environmental Engineer, Dragun Corporation

• Schilling Project and agenda overview. (*Tim Rogers, Executive Director, Salina Airport Authority*)

## 3. Action Items

- <u>Legal Counsel Presentation</u>. Review of the negotiated Consent Decree between the City of Salina, Salina Airport Authority, Unified School District No. 305, and Kansas State University (the Salina Public Entities) and the United States of America (USA). The Consent Decree settles claims against the USA involving responsibility for environmental response actions and response costs at the Salina Airport and Airport Industrial Center which is the site of the former Schilling Air Force Base. (*Andy Davis, special environmental counsel, Stinson, LLP*)
- <u>Legal Counsel Presentation</u>. Review of the Environmental Project Management Agreement between the City of Salina, Unified School District No. 305, Kansas State University and the Salina Airport Authority for the financing and completion of Remedial Actions in accordance with a Kansas Department of Health and Environment approved Remedial Design. (*Greg Bengtson, attorney, Clark Mize and Linville*)
- Salina Airport Authority
  - Consideration of a motion approving the proposed Consent Decree and authorize the Airport Authority board chairman to sign the document on behalf of the Airport Authority. (*Public comment would follow a motion and board discussion*)
- <u>USD 305</u>
  - Consideration of a motion approving the proposed Consent Decree and authorize the USD 305 board president to sign the document on behalf USD 305. (*Public comment would follow a motion and board discussion*)
- City of Salina
  - Consideration of a motion approving the proposed Consent Decree and authorize the City of Salina mayor to sign the document on behalf of the City of Salina. (*Public comment would follow a motion and board discussion*)
- 4. Closing Comments (*Tim Rogers, Executive Director, Salina Airport Authority*)

## 5. Adjournment

- <u>City of Salina</u>. Motion to adjourn (Mayor Hoppock)
- <u>USD 305</u>. Motion to adjourn (President Zimmerman)
- <u>Salina Airport Authority</u>. Motion to adjourn (Chairman Eichelberger)



# **SPEs Joint Special Meeting**

# **Summary of Schilling Project Settlement Negotiations**

# Wednesday, June 24, 2020

#### Mediation Results

- Mediation concluded on January 15, 2020
- Settlement terms were recorded in a Confidential Mediation Terms Agreement dated January 15, 2020
- The terms agreement provided for the onetime payment by the USA of \$65.9M to settle all claims against the USA
- The terms agreement provided that the USA would release claims against the SPEs
- Parties agreed to negotiate a Consent Decree to be approved by a federal judge (U.S. District Court, District of Kansas
- The USA \$65.9M settlement payment will be limited for use for the Schilling Project cleanup. The SPEs will have full discretion to spend the funds on Remedial Design (RD) and Remedial Action (RA), including all associated administrative and legal costs
- Following Consent Decree approval by the SPEs, DOJ and U.S. District Court, the USA will make a \$65.9M lump sum payment to the SPEs

#### KDHE Guidance for a Revised Remedial Design

- KDHE was immediately consulted at the conclusion of mediation about the possibility of revising the project's initial remedial design to match available federal funds
- Dragun Corporation has actively worked to develop Remedial Design, Phase 1 that meets all requirements for site cleanup and remain protective of human health and the environment.
- The final draft of the Remedial Design, Phase 1 was submitted to KDHE on May 26
- The Remedial Design, Phase 1 cost estimate is \$71,700,000 detailed as follows:
  - \$60,945,000 for project design, construction, and operation & maintenance
  - \$10,755,000 for project contingency
- Project contingency funds can be used to offset local funding.

#### Project Cash Flow

- An updated cash flow projection was updated by Stifel Public Finance
- The update cash flow included updates to estimated inflation factors and public funds investment rates
- Specific inflation factors for specific project tasks were used instead of one overall inflation factor
- The 05/29/20 Investment and Project Cash Flow confirms that the project can be completed without committing additional local funds the \$65.9M settlement (plus \$1.8M in federal funds

that carry over from the RI/FS/CAD project) will fund the project without the need for City and Airport Authority local contributions. Total federal funds available, \$67,882825.

## Salina Public Entities - Environmental Remediation Project

## Investment & Project Cash Flow

### Inflation Rates by Task and 0.001% Investment Rate

Assumptions		
Present Value Project Cost		71,700,000
Project Expenses		60,945,000
Contingency	15.00%	10,755,000
Federal Settlement (Lump Sum)		67,882,825
Local Contribution		-
Contingency used to balance projected shortfall due to inflation out pacing investment income		5,142,449
Contingency used to fund insurance coverage deductible		250,000
Revised Contingency (% of original cost)	7.48%	5,362,551
Estimated Annual Investment Rate		0.001%

**Note:** The 15% Project contingency is the result of two estimates. First, the estimated contingency built into project costs and second, the estimated general contractor(s) markups.

#### **Environmental Insurance Coverage and Risk Management**

- Insurance companies specializing in environmental insurance coverages were contacted to determine interest in providing the SPEs insurance coverage to meet Consent Decree indemnification requirements and possible third-party claims of personal injury and/or property damage.
- A May 4, 2020 Stinson LLP memo reviewed various risks associated with indemnity provisions and exposure to third party claims. The overall risk is low, but the purchase of environmental insurance specific to the project is advised.
- The SPEs would be named as co-insureds entitled to 100% of the benefits of the coverage
- Two insurers have been pre-qualified by the SAA's insurance broker, Lockton Companies
- One quote has been received as of May 29, 2020 (all premium quotes are one-time, lump sum payments)
  - \$5M limit, five-year policy, \$117,000
  - o \$10M, five-year policy, \$164,000
  - \$20M, five-year policy, \$235,000
  - \$250,000 deductible
- Lockton will submit a written report covering marketing efforts and summary of the Ascot coverage.
- Coverage will be purchased following Court approval of the Consent Decree and Entry of Judgement.

#### **Consent Decree Negotiations**

- The DOJ provided the SPEs a draft CD with their standard settlement terms
- The SPE concerns included
  - Definitions
  - The impact of the Kansas cash basis laws on the SPEs
  - SPEs releases and covenants not to sue the USA
  - The requirement to indemnify the USA against claims
  - Prompt payment of \$65,900,000 to the SPEs

#### Environmental Project Management Agreement

- With Consent Decree negotiations completed the December 2012 Interlocal Agreement (City, Airport Authority, K-State and USD-305) will be replaced by a new Environmental Project Management Agreement. The Environmental Project Management Agreement will not require Kansas Attorney General approval
- Like the SPEs 2012 Interlocal Agreement
- Provisions of the agreement include:
  - Continued project oversight by the "Executive Group" SPEs CEOs
  - o The administration of project contracts by the City of Salina
  - Dragun continuing as project environmental and consulting firm
  - The selection of a project manager, Martha Tasker, by the Executive Group
  - The purchase of third-party liability insurance coverage naming the City, SAA, K-State and USD 305 as additional insureds
  - The payment of future environmental legal and engineering fees from the "Former SAFB RD/RA Fund"
  - Reimbursement of SPEs environmental legal and engineering work completed since January 15, 2020 to the effective date of 2020 Consent Agreement
- The SPEs will be presented the Environmental Project Management Agreement at the June 24 joint meeting. Each respective SPE governing board will take action to approve the agreement as agenda scheduling permits.

#### **KDHE Consent and Final Order (CAFO)**

• KDHE will provide regulatory oversight for the final Remedial Design (RD) and Remedial Action (RA), a/k/a "the clean-up," by means of a Consent and Final Order (CAFO). It is possible that the current CAFO covering the RI/FS/CAD phase can be amended. Amending the current CAFO or approval of a new CAFO would occur following the Consent Decree approval process.

#### **Approval Process and Timeline**

- The DOJ will format the Consent Decree in final form
- The SPEs will consider the Consent Decree and Update Interlocal Agreement at a joint meeting to be scheduled for June 24
- The DOJ and U.S Army Corps of Engineers (USACE) will sign the Consent Decree following SPEs approval and signatures

- Following DOJ and USACE signatures the Consent Decree will be submitted to the U.S. District Court, Kansas for review, approval, and entry of a final judgement in accordance with the terms of the Consent Decree
- Following an entry of final judgement, the DOJ will submit the final judgement to the U.S. Treasury for payment of \$65.9M from the Treasury's Judgement Fund to the SPEs

#### June 2020

- June 9 USD 305 BOE executive session with Andy Davis and Erin Wright
- June 10 SAA BOD executive session with Andy Davis and Greg Bengtson
- June 10 Stinson (Andy Davis) contacts Kate Gleason (KDHE) to inquire as to Phase I Remedial Design approval status
- June 19 Draft Environmental Project Management Agreement ready for presentation to the governing boards
- June 24 SPEs joint meeting to approve and sign the Consent Decree
- June 25 Submit the signed (by the SPEs) Consent Decree to the DOJ
  DOJ approval and signature expected within three-four (3-4) weeks July 17-24
- June 30 Draft U.S. District Court complaint delivered to DOJ
- June 30 Draft Joint Motion for Approval of Consent Decree delivered by DOJ to Stinson for review

#### July 2020

- July 24 Stinson files complaint and DOJ or Stinson files Joint Motion for Approval of Consent Decree, with the U.S. District Court Kansas
  - The case will be assigned to a federal judge and his/her docket. Timing for the Court's approval is uncertain but is likely within 1-2 months. Hearings on joint motions for approval are usually not held, but it is possible the Court will hold a hearing.
  - Stinson will contact the Court immediately after filing and inform it that the United States will not file an Answer in the action, and that the Court can immediately review the Consent Decree.
- July 30 SPEs complete governing board approvals for the Environmental Project Management Agreement

#### August 2020

- August 21 The Court approves the Consent Decree and the Clerk of the Court enters final judgement
  - Court approval and signature is the Consent Decree's effective date
  - Following the Court's Order of Final Judgement, the SPEs will have access to \$1.8 million previously paid by the USA
- August 28 DOJ submits the Consent Decree and Court Order of final judgement to the U.S. Treasury for payment of \$65.9M from the Judgement Fund

• Payment will be "...as soon as practicable after the effective date of the Consent Decree," If not paid within 90 days, the USA will pay interest on the unpaid balance.

#### November 2020

November 20 - Payment received from the USA

- Payment will probably be made prior to November 20 but not much earlier
- Stinson (Andy Davis) contacts KDHE to start Amended CAFO draft process.
- KDHE provides draft of Amended CAFO for the performance of the RD process.

#### December 2020

- Negotiations on Amended CAFO complete and the SPEs sign the Amended CAFO.
- Amended CAFO is signed and executed by the Secretary of KDHE.

#### Project Start-up Following the Entry of Judgement

- Approximately \$1.8M of federal funds are already on deposit.
- The SPEs will be able to use the funds for initial engineering, administrative, insurance and legal costs such as:
  - Start final remedial design
  - o Pay the environmental insurance policy premium
  - Reimburse the SPEs for legal cost incurred since January 15, 2020 to CD effective date
    - Approximately \$93,500 per SPE

## UNITED STATES DISTRICT COURT FOR THE DISTRICT OF KANSAS

CITY OF SALINA, KANSAS, SALINA AIRPORT AUTHORITY, UNIFIED SCHOOL ) DISTRICT No. 305 OF SALINE COUNTY, ) KANSAS, and KANSAS STATE ) UNIVERSITY, )

Plaintiffs,

v.

UNITED STATES OF AMERICA,

Defendant.

Civ. Act. No. \_\_\_\_\_

CONSENT DECREE

This Consent Decree ("Consent Decree") is entered into between Plaintiffs City of Salina, Kansas, Salina Airport Authority, Unified School District No. 305 of Saline County, Kansas, and Kansas State University (collectively "Salina Public Entities" or "SPEs"), and Defendant United States of America ( "United States") (collectively, the "Parties").

## RECITALS

A. This case concerns a dispute between Plaintiff SPEs and Defendant United States regarding the allocation of responsibility for environmental response actions and response costs at the Salina Airport and Industrial Center Site located in Salina, Kansas, on property that was the location of the former Schilling Air Force Base.

B. The SPEs filed a Complaint in this matter, brought pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act

("CERCLA"), 42 U.S.C. §§ 9601-9675, alleging that Defendant United States is liable to Plaintiff SPEs for past and future response costs incurred or to be incurred by the SPEs regarding contamination located at, on, or from the Site. Defendant United States alleges that the SPEs are each potentially responsible parties with regard to the Site within the meaning of CERCLA Section 107(a), 42 U.S.C. § 9607(a), and that the SPEs are liable for some or all of the past or future response costs incurred or to be incurred by the United States at the Site.

C. The Parties desire to enter into this Consent Decree to reach a full and final resolution and settlement of the claims in this case, without the admission or adjudication of any matter of fact or law. This Consent Decree shall not constitute or be construed as an admission of liability by either Party or as an admission of violation of any law, rule, regulation, or policy by either Party. Furthermore, this Consent Decree shall not constitute or be construed as an admission or denial by either Party with respect to any factual or legal allegation or issue.

D. The Parties state, and the Court finds, that this Consent Decree has been negotiated by the Parties in good faith and at arm's length, that both Parties had access to competent legal and expert advice, that the terms of the Consent Decree represent a fair and equitable compromise of the claims in this case, and that such claims were vigorously contested. The Parties agree, and the Court finds, that the Consent Decree is fair, reasonable, and in the public interest.

#### CONSENT DECREE

1. <u>Jurisdiction</u>. This Court has subject matter jurisdiction over the claims in this case pursuant to 28 U.S.C. §§ 1331 and 1345, and 42 U.S.C. §§ 9607 and 9613(b). The Parties agree not to challenge the terms of this Consent Decree or the Court's jurisdiction to enter and enforce the Consent Decree.

2. <u>Parties Bound.</u> The Parties to this Consent Decree are the SPEs and the United States, as further defined in Paragraph 4(v) and 4(z) below. This Consent Decree applies to, is binding upon, and inures solely to the benefit of, the SPEs and the United States. No change in ownership or governmental, corporate, or other legal status, including but not limited to any bankruptcy, transfer of stock, assets, ownership interests, or real or personal property, shall alter the Parties' responsibilities and obligations under this Consent Decree. The SPEs shall provide notice to the United States within thirty (30) days after the Effective Date of any material change in governmental, corporate, or other legal status.

3. <u>No Third-Party Beneficiary.</u> This Consent Decree does not inure to the benefit of any party, person, or entity other than the SPEs and the United States. Nothing in this Consent Decree shall be construed to make any other person or entity not executing this Consent Decree a third-party beneficiary of this Consent Decree, or to create any other rights in, or grant any cause of action to, any person not a party to this Consent Decree.

4. <u>Definitions.</u> Unless otherwise expressly provided herein, terms used in this Consent Decree that are defined in CERCLA or in federal regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever the following terms are used in this Consent Decree or any appendices, the following definitions shall apply for purposes of this Consent Decree:

(a) "CAD" or "Corrective Action Decision" shall mean the final decision of the Kansas Department of Health and the Environment ("KDHE") selecting the final remedy to be implemented at the Salina Airport and Industrial Center Site, issued on July 29, 2019, including any future changes or amendments to the CAD.

(b) "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675, as amended.

(c) "City of Salina" shall mean the City of Salina, Kansas, including its governing bodies, assigns, successors, and designees.

(d) "Complaint" shall mean the complaint filed in the abovecaptioned action, including any amendments thereto.

(e) "Consent Decree" shall mean this Consent Decree.

(f) "Covered Substances" shall mean any solid or hazardous waste, hazardous substance, Waste Material, petroleum, pollutants, or other contaminants under federal law or Kansas state law, including but not limited to all contaminants subject to the remedial action requirements of the CAD.

(g) "Day" shall mean a calendar day. In computing any period of time under this Consent Decree, where the last day would fall on a Saturday, Sunday, or federal or state holiday, the period shall run until the close of business of the next working day.

(h) "Defendant" shall mean the United States.

(i) "Department of Defense" shall mean the United States
 Department of Defense, including its offices, agencies, activities, commands,
 and instrumentalities, and the Military Departments, as defined in 10 U.S.C. §
 111.

(j) "Effective Date" shall mean the date upon which the approval of this Consent Decree by the Court is recorded on the Court's docket.

(k) "EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

(l) "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year. See <u>https://www.epa.gov/superfund/superfund-interest-rates</u>.

(m) "Justice Department" shall mean the United States Department of Justice and its successor departments, agencies, or instrumentalities.

(n) "Kansas Department of Health and Environment" or "KDHE" shall mean the department of the State of Kansas with environmental regulatory authority over the response actions to be conducted at the Site.

(o) "Paragraph" shall mean a portion of this Consent Decree identified by an Arabic numeral or an upper or lower case letter.

(p) "Party" or "Parties" shall mean either the individual or collective of the SPEs and the United States.

(q) "Plaintiffs" shall mean the SPEs.

(r) "RCRA" shall mean the Solid Waste Disposal Act, 42 U.S.C.§§ 6901 - 6992 (also known as the Resource Conservation and Recovery Act).

(s) "Response Action" shall mean the environmental response actions for any Covered Substance at, on, or from the Site, as required by the CAD and/or by any other federal, state, or local law, as well as all related activities necessary to complete the response actions to achieve remediation goals to protect human health and the environment (including any future requirements arising under federal, state, or local law).

(t) "Response Costs" shall mean all costs, including but not limited to direct and indirect costs, incurred or to be incurred by the SPEs related to the Response Action, including but not limited to the cleanup of, response to, or the corrective action or closure at, on, or from the Site, including costs to comply with or implement any past or future federal, state, or local environmental requirement, whether voluntary or compelled, or to otherwise address environmental conditions at or related to the Site. This includes any

and all costs incurred by the SPEs pursuant to CERCLA, RCRA, or other federal law, state law, or common law related to the Site. Response Costs also include accrued Interest on all such costs and including all payments to, or costs of, federal, state, local, or other governmental authorities. Response Costs include all costs for actions by the SPEs to comply with specific or general environmental requirements and facility maintenance, development, repair, modification, compliance, or operational activities that are in any way related to environmental cleanup, at, on, or from the Site, in the past or in the future.

(u) "Salina Airport Authority" shall mean the Salina Airport Authority (including the Salina Regional Airport, SLN Aviation Service Center, and the Salina Airport Industrial Center), and their governing bodies, assigns, successors, and designees.

(v) "Salina Public Entities" or "SPEs" shall mean the City of Salina, Kansas; Salina Airport Authority (including the Salina Regional Airport, SLN Aviation Service Center, and the Salina Airport Industrial Center); Unified School District Number 305 of Saline County, Kansas; and Kansas State University (including the Kansas Board of Regents). Any reference to "SPEs" in this Consent Decree is intended to include each and every Plaintiff in this case, both collectively and individually, jointly and severally, and to include their governing bodies, assigns, successors, and designees.

(w) "Settling Federal Agencies" shall mean the Department of Defense, the United States General Services Administration, and any other

department, agency, or instrumentality of the United States that may be liable for Response Costs, and their respective predecessor and successor departments, agencies, or instrumentalities.

(x) "Site" shall mean the Salina Airport and Industrial Center, and all properties that were at any time a part of the United States-owned Schilling Air Force Base, including any property that is or has been owned by any of the SPEs at this location. "Site" also includes areas at, on, and from which Covered Substances may have migrated from the area described in the previous sentence.

(y) "State" shall mean the State of Kansas.

(z) "United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA and the Settling Federal Agencies.

(aa) "USACE" shall mean the United States Army Corps of Engineers, which is included in the definition of Settling Federal Agencies.

(bb) "Waste Material" shall mean (1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (2) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C § 6903(27); (4) "pollutant" or "toxic pollutant" under the Clean Water Act, 33 U.S.C. § 1362; and (5) any "hazardous material," "hazardous substance," "hazardous waste," or "pollution" under K.S.A. §§ 65-3471(b), 65-3452a, 65-3430(e), and 65-171d(c)(1).

5. <u>Performance of Work</u>. The SPEs shall perform the Response Action in the CAD. The Parties expect that KDHE will be the lead regulatory agency, that the SPEs will be responsible for all required or necessary coordination with KDHE throughout the performance of the Response Action, and that KDHE will require the SPEs to enter into an agreement or agreed order providing for the performance of any additional response actions at the Site. Among other response actions, the SPEs will complete all necessary site investigations, remedial design, remedial action, long-term monitoring, community relations, and operation and maintenance of all elements of the response actions at the Site. However, the releases and covenants not to sue granted by the SPEs to the United States in this Consent Decree are not conditioned on the SPEs' performance of the Response Action, or on the performance of the Response Action by any other person, including by KDHE.

#### 6. Payment by the United States.

(a) As soon as reasonably practicable after the Effective Date of this Consent Decree, the United States, on behalf of the Settling Federal Agencies, shall pay \$65,900,000 to the SPEs. Payment will be made via electronic funds transfer to the SPEs in accordance with electronic funds transfer instructions the SPEs shall provide to the United States.

(b) In the event the payment by the United States described in Paragraph 6(a) above is not made within 90 days after the Effective Date, Interest on the unpaid balance shall accrue beginning on the 91<sup>st</sup> day after the Effective Date and continuing through the date of payment. In the event that

the United States is unable to make the payment due to an error in the electronic funds transfer instructions provided by the SPEs, any time limits for payments by the United States shall be tolled until after the correct account information is provided to the United States.

7. <u>Retention of Certain Funds by SPEs.</u> As of the Effective Date, and in further consideration for the releases and covenants not to sue granted by the SPEs to the United States in this Consent Decree, the SPEs may retain any remaining funds (including accrued interest thereon) that were paid by the United States into a fund under the terms of the consent decree entered in *City of Salina, Kansas v. United States*, Civ. Act. No. 10-cv-2298 CM/DJW (D. Kan.), on May 2, 2013. To the extent permitted by law, the federal funds retained by the SPEs may be combined with local matching funds for the completion of the Response Action.

8. <u>Anti-Deficiency Act.</u> All payment obligations by the United States under this Consent Decree are subject to the availability of appropriated funds appropriated for such purpose. No provision of this Consent Decree shall be interpreted as, or constitute a commitment or requirement, that the United States obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. § 1341, or any other applicable federal law, regulation, or requirement.

9. <u>SPEs' Releases and Covenants Not to Sue.</u> Upon the Effective Date, the SPEs and their directors, officers, employees, and agents, forever discharge, release, covenant not to sue, and agree not to assert any claims under any theory of recovery against the United States, or its officers, contractors, or

employees, including the Settling Federal Agencies, whether asserted under federal, state, or local law or regulation, or under the common law, with respect to the Response Action and Response Costs. However, this release and covenant not to sue shall not apply to claims related to United States Department of Defense "unexploded ordnance" (or "UXO") as defined in 10 U.S.C. § 101(e)(5) or natural resource damages at or in connection with the Site.

10. Indemnification of the United States by SPEs. The City of Salina and the Salina Airport Authority shall jointly and severally indemnify and hold harmless the United States and its officers, contractors, and employees against any and all past and future written claims, demands, orders, causes of action, and/or judgments against the United States by any person, governmental entity, company, organization or any other entity arising from or related to the Response Action and/or Response Costs, including but not limited to claims or demands asserted against the United States by KDHE, or related to the SPEs' performance of the Response Action. The United States is not aware of any such past claims from third parties that are unresolved or pending at the time of entry of this Consent Decree. The United States shall give the City of Salina and the Salina Airport Authority written notice promptly after receipt of any such claim or demand for which the United States intends to seek indemnification pursuant to this Paragraph. Upon request of the City of Salina and/or the Salina Airport Authority, the United States shall provide

documentation relating to its demand for indemnification promptly after its receipt of such request.

11. <u>United States' Covenant Not to Sue.</u> As of the Effective Date, the United States forever releases and covenants not to sue the SPEs for any and all claims under federal or state law related to response costs incurred by the United States at or related to the Site, or response action(s) taken by the United States at or related to the Site, including but not limited to the United States' payment under Paragraph 6 of this Consent Decree and the United States' agreement that the SPEs may retain certain funds as specified under Paragraph 7, except to the extent claims are expressly reserved below in this Consent Decree.

12. <u>United States' Reservations of Rights.</u> The United States reserves any rights it may have against the SPEs under CERCLA or any other federal, State, or local law or regulation, or under the common law, for response actions or response costs that have been or may be taken or incurred at the Site by EPA or any other federal agency acting as a lead agency under the CERCLA National Contingency Plan, after the Effective Date of this Consent Decree, and any claim for natural resource damages made on behalf of any federal natural resource damage trustee

13. <u>No Preauthorization of Claim.</u> Nothing in this Consent Decree shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611(a)(2), or 40 C.F.R. § 300.700(d), or any government contract, grant, or other funding instrument.

14. <u>Claims Against Third Parties.</u> The Parties expressly reserve any and all claims and rights (including, but not limited to, pursuant to Section 107(a) and Section 113(f) of CERCLA, 42 U.S.C. §§ 9607(a) and 9613(f)), defenses, demands, and causes of action that each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Response Action or Response Costs against any person not a party to this Consent Decree. Nothing in this Consent Decree diminishes the right of the United States or the SPEs, pursuant to Section 113(f)(1) and (3) of CERCLA, 42 U.S.C. § 9613(f)(1), (3), to pursue any such persons to obtain additional costs of response or to perform the Response Action, and to enter into settlements that give rise to contribution protection pursuant to 42 U.S.C. § 9613(f)(2). If, however, the SPEs pursue claims against another person, and that person asserts claims against the United States as a result, the SPEs shall indemnify the United States with regard to such claims pursuant to Paragraph 10 above.

15. <u>Contribution Protection</u>. The Parties acknowledge and agree that the payments to be made by the United States pursuant to this Consent Decree represent a good faith compromise of disputed claims and that the compromise represents a fair, reasonable, and equitable discharge for the matters addressed in this Consent Decree. The Court finds that the United States is entitled to contribution protection pursuant to 42 U.S.C. § 9613(f), or as may otherwise be provided by law, including common law, for the "matters addressed" in this Consent Decree, extinguishing the United States' liability to persons not a Party to this Consent Decree. The "matters addressed" in this

Consent Decree are the Response Action and Response Costs as defined in Paragraph 4(s) and 4(t).

16. <u>Res Judicata and Other Defenses.</u> In any subsequent administrative or judicial proceeding initiated by the United States for injunctive relief, recovery of response costs and/or natural resource damages, or other relief relating to matters set forth in Paragraph 12 above, the SPEs shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been brought in this case.

#### 17. <u>Record Retention.</u>

(a) Until ten years after the Effective Date, the SPEs shall preserve and retain all non-identical copies of records, reports, information or correspondence (hereinafter referred to as "Records") (including records in electronic form) now in its possession or control, or that come into their possession or control, that relate in any manner to the Response Action or Response Costs, or the liability of any person under CERCLA at the Site, or any natural resource damages claims or assessments at the Site, regardless of any governmental corporate retention requirement or policy to the contrary.

(b) After the conclusion of the ten-year document retention period described in the preceding paragraph, the SPEs shall notify the Settling Federal Agencies and the Justice Department through the contact information stated in

paragraph 18 at least 90 days prior to the destruction of any such Records, and, upon request by one of the Settling Federal Agencies or the Justice Department, the SPEs shall deliver any such records to the requesting entity. The SPEs may assert that certain Records are privileged under the attorneyclient privilege or any other privilege recognized by federal law. If the SPEs assert such a privilege, the entity claiming the privilege shall provide the Justice Department with the following: (1) the title of the Record; (2) the date of the Record; (3) the name, title, affiliation (e.g., company or firm), and address of the author of the Record; (4) the name and title of each addressee and recipient; (5) a description of the subject of the Record; and (6) the privilege asserted. If a claim of privilege applies only to a portion of a Record, the Record shall be provided to the Justice Department in redacted form to mask the privileged information only. The SPEs shall retain all Records they claim to be privileged until the United States has had a reasonable opportunity to dispute the privilege claim and any such dispute has been resolved in favor of the SPEs. However, no Records created or generated pursuant to the requirements of this Consent Decree shall be withheld on the grounds that they are privileged or confidential. The transfer of Records under this provision from the SPEs to the United States shall not be considered a waiver of any claim of attorney-client privilege the SPEs may otherwise raise concerning a Record with regard to any third party.

(c) Nothing in this provision negates or otherwise affects any obligations the SPEs may have to retain information related to the Site, either

during the ten years following the Effective Date or for a longer period, pursuant to federal or state law, or pursuant to other agreements between the SPEs and the United States.

18. <u>Notices and Submissions.</u> Whenever notice is required to be given or a document is required to be sent by one Party to another under this Consent Decree, it shall be directed to the Party at the addresses specified below, unless a Party gives notice of a change to the other Parties in writing. Written notice as specified in this Section shall constitute complete satisfaction of any written notice requirement of the Consent Decree.

As to Justice Department or the United States:

Chief Environmental Defense Section Environment and Natural Resources Division U.S. Dept. of Justice P.O. Box 7611 Washington, D.C. 20044-7611 Re: DJ # 90-11-6-19966

With a copy to:

HQUSACE Office of the Chief Counsel CECC-E 441 G Street, NW Washington, DC 20314 As to the SPEs:

City of Salina, Kansas

City Manager City of Salina, Kansas 300 W. Ash St. Salina, KS 67401

Salina Airport Authority

Executive Director Salina Airport Authority 3237 Arnold Avenue Salina, KS 67401

## Unified School District Number 305 of Saline County, Kansas

Superintendent USD 305 1511 Gypsum Ave. Salina, KS 67401

With copy to:

Eryn Wright, JD, MSW Executive Director of HR and Legal Services USD 305 1511 Gypsum Ave. Salina, KS 67401 785.309.4726

Kansas State University

Office of the President Kansas State University 110 Andersen Hall 919 Mid-Campus Dr., North Manhattan, Kansas 66506

With copy to:

Office of General Counsel Kansas State University 111 Anderson Hall 919 Mid-Campus Dr., North Manhattan, Kansas 66506 <u>attys@ksu.edu</u>

19. <u>Retention of Jurisdiction.</u> This Court shall retain jurisdiction over this matter for the purpose of interpreting and enforcing the terms of this Consent Decree.

20. <u>Modifications in Writing.</u> Any material modification to this Consent Decree shall be in writing, signed by the United States and the SPEs, and effective upon approval by the Court. Minor or immaterial modifications, such as, for example, mailing addresses, do not require approval by the Court.

21. <u>Signatories/Service of Process.</u>

(a) The undersigned representatives of the SPEs and the signatory for the United States certify that they are fully authorized to enter into the terms and conditions of this Consent Decree and to execute and legally bind such Party to this document.

(b) The SPEs shall identify, on the signature pages of this Consent Decree, the name, address, and telephone number of an agent who is authorized to accept service of process by mail on behalf of each member of the SPEs with respect to all matters arising under or relating to this Consent Decree.

22. <u>Complete Agreement.</u> This Consent Decree contains the complete agreement between the Parties regarding the subject matter addressed herein and fully supersedes all prior contracts, agreements, understandings,

negotiations or discussions, oral or written, relating to the subject matter hereof. There are no warranties, representations, agreements or understandings, oral or written, relating to the subject matter hereof that are not fully expressed or provided for herein.

23. <u>Headings.</u> Any Paragraph or subparagraph headings in this Consent Decree are provided solely as a matter of convenience to the reader and shall not be construed to alter the meaning of any Paragraph or provisions of this Consent Decree.

24. <u>Governing Law.</u> This Consent Decree shall be governed and interpreted in accordance with federal law.

25. <u>Counterparts.</u> This Consent Decree may be executed in original counterparts, all of which together shall be deemed to constitute one Consent Decree. The execution of one counterpart by any Party shall have the same force and effect as if that Party had signed all other counterparts.

26. <u>No Use as Evidence</u>. This Consent Decree shall not be admitted into evidence or be admissible as evidence in any action or proceeding other than in this case in which this Consent Decree is entered, except for the following:

(a) A claim, cross-claim, or counterclaim brought by the United States or the SPEs to enforce this Consent Decree; and

(b) Any proceeding where the United States seeks to establish that it is entitled to protection from claims under this Consent Decree, or to enforce the indemnification of the United States by the SPEs under Paragraph 10, or any action or proceeding related to the obligations of the SPEs under this

Consent Decree, including any administrative or judicial proceeding related to or resulting from any federal contract or grant or any other federal funding instrument.

27. <u>No Assignment or Transfer by SPEs.</u> The SPEs warrant and represent that they have made no assignment or transfer of all or any part of their rights arising out of or relating to this Consent Decree, including to the State of Kansas, or any other party. For purposes of this section, "assignment or transfer" shall not be deemed to include any general governmental or corporate reorganizations, mergers, assignments, transfers, or acquisitions that have occurred prior to or during the course of this litigation; provided, however, that the affected member of the SPEs has given the United States written notice of such assignment or transfer before the Effective Date, and that the parties to any such assignment or transfer have acknowledged or agreed, in writing, to be bound by the terms of this Consent Decree.

#### So CONSENTED and AGREED to by:

FOR THE SPEs:

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

City of Salina, Kansas Agent for Service of Process: Date: \_\_\_\_\_

Salina Airport Authority, Salina, Kansas Agent for Service of Process:

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

Unified School District Number 305 of Saline County, Kansas Agent for Service of Process:

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

Kansas State University Agent for Service of Process

FOR DEFENDANT UNITED STATES OF AMERICA:

JEFFREY BOSSERT CLARK Assistant Attorney General Environment and Natural Resources Division

Dated: \_\_\_\_\_ By:

DANIEL PINKSTON Environmental Defense Section Environment and Natural Resources Division U.S. Department of Justice 999 18<sup>th</sup> Street, South Terrace, Suite 370 Denver, Colorado 80202 (303) 844-1804 Daniel.pinkston@usdoj.gov

## <u>ORDER</u>

UPON CONSIDERATION OF THE FOREGOING, the Court hereby finds

that this Consent Decree is fair and reasonable, both procedurally and

substantively, consistent with applicable law, in good faith, and in the public

interest. The foregoing Consent Decree is hereby ENTERED. This Court

expressly directs, pursuant to Fed. R. Civ. P. 54 and 58, ENTRY OF FINAL JUDGMENT in accordance with the terms of this Consent Decree.

So ORDERED this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

UNITED STATES DISTRICT JUDGE

Remedial Design, Phase I Former Schilling Air Force Base Salina, Kansas



Prepared for

Salina Public Entities c/o Martha Tasker 300 West Ash PO Box 736 Salina, Kansas 67402-0736

Prepared by

**Dragun**Corporation

Environmental Advisors

30445 Northwestern Highway, Suite 260 Farmington Hills, Michigan 48334-3175 Phone (248) 932-0228 Fax (248) 932-0618 Project #27110-03 Matthew C. Schroeder, P.E. Project Manager

Michael G. Sklash, Ph.D. Senior Hydrogeologist

May 20, 2020

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#### LIST OF ACRONYMS

ACRONYM	DESCRIPTION
μg/L	Micrograms per liter
ATGs	Alternative Treatment Goals
СТ	Carbon Tetrachloride
CVOCs	Chlorinated Volatile Organic Compounds
DGR	Directed Groundwater Recirculation
fasl	Feet above sea level
fbgl	feet below ground level
ft	feet
gpm	gallons per minute
HPT	Hydraulic Profiling Tool
ISTD	In Situ Thermal Desorption
KDHE	Kansas Department of Health and Energy
MIP	Membrane Interface Probe
MNA	Monitored Natural Attenuation
NPDES	National Pollution Discharge Elimination System
OU1	Operable Unit 1
OU2	Operable Unit 2
PCE	Tetrachloroethylene
PFAS	Per- and Polyfluoroalkyl Substances
PRBs	Permeable Reactive Barriers
RGs	Remedial Goals
SAFB	Schilling Air Force Base
TCE	Ttrichloroethylene
ТСН	Thermal Conductive Heating
VEWs	Vapor Extraction Wells
VOCs	Volatile Organic Compounds
ZVI	Zero Valent Iron

### **LIST OF FIGURES**

#### **FIGURE #** TITLE

- 1 Remediation Locations
- 2 Plume A Source Area, OU1 Proposed Thermal Soil Treatment
- 3 Plume C Source Area, OU1 Proposed Thermal Soil Treatment
- 4 Plume B Source Area, OU1 Proposed Excavation
- 5 DGR System Conceptual Configuration

#### LIST OF APPENDICES

#### APPENDIX TITLE

A Analysis of Downgradient Overburden Groundwater Quality In Response to Source Remediation Efforts at the Former SAFB

### **INTRODUCTION**

This document presents the current status of the design for the remediation of the environmental impacts at the former Schilling Air Force Base (SAFB) in Salina, Kansas (the Site). It is designated "Remedial Design, Phase 1," and future refinement to the design will be presented to KDHE for review as Phase 2, Phase 3, etc. The Remedial Design, Phase 1 includes the remediation framework based on our current knowledge of the Site. It is currently somewhat conceptual in nature in that the specific locations and dimensions for the remedial infrastructure will be refined as the design process progresses. The project plan includes further investigation and testing in support of the design. As this information is obtained and evaluated, we anticipate refining the design to best match the site conditions.

Figure 1 summarizes the Remedial Design, Phase 1 for the former SAFB. The Remedial Design, Phase 1 includes:

- Thermal treatment of impacted soil and bedrock in the Plume A source area and impacted soil in the Plume C source area. Groundwater in the treatment zones will also be remediated.
- Excavation and soil disposal in the Plume B soil source area.
- Directed groundwater recirculation in the most-impacted parts of the groundwater Plumes A-D in OU1 and Plumes F and G in OU2.
- Monitored natural attenuation for the downgradient portions of Plumes A-D, F, and G and Plumes E, I, J, and K.
- Emplaced permeable reactive barriers immediately downgradient of the Plume F and Plume G soil source areas (source barriers).
- Injected permeable-reactive barriers near the downgradient end of Plumes D, E, F, and G (leading-edge barriers).

The remainder of this document summarizes the proposed remediation.

#### THERMAL TREATMENT

In Situ Thermal Desorption (ISTD) technology will be implemented to meet the Alternative Treatment Goals (ATGs) defined in the Feasibility Study, Revision 2<sup>1</sup> for the overburden soil sources at Plumes A and C and for the bedrock source area at Plume A. ISTD will remove volatile organic compounds (VOCs) in the unsaturated soil, saturated soil, and bedrock "hot

<sup>&</sup>lt;sup>1</sup> Dragun Corporation, 2017. Feasibility Study Report, Revision 2. Former Schilling Air Force Base, Salina, Kansas. Dated November 16, 2018.

spots" that have resulted in the groundwater impacts emanating from Plumes A and C. Details are provided in TerraTherm's "Basis of Design Report," dated January 19, 2017.<sup>2</sup>

The recommended ISTD plan provides heat to the subsurface by the Thermal Conductive Heating (TCH) method. TCH increases the subsurface temperature to near the boiling point of the VOCs, enhancing the rate of VOC volatilization. Volatilized chemicals are then captured by a vacuum-extraction system which, in turn, discharges the vapors and condensate (or steam) through granular-activated carbon.

Figures 2 and 3 show the locations of the various in-ground components of the ISTD system at the Plume A and C source areas, respectively. The TCH systems in both source areas include: ISTD heater wells, vapor extraction wells, and temperature monitoring points. The Plume C system also includes a surface cover over the remediation area and two horizontal vapor extraction wells placed between the remediation system and the adjacent building to the southeast (Figure 3).

The heater wells will be installed at an approximate 15-foot spacing through the full thickness of the impacted zones plus five feet at the Plume A and C source areas (see insets in Figures 2 and 3, respectively, which show the depth distribution of the impacted soil/rock and groundwater and schematics of the ISTD wells). For the Plume A source area, the heating wells will extend from the ground surface to 50 feet below ground level (fbgl), which includes approximately 35 feet of bedrock. In the Plume C source area, the ISTD wells will be arranged in two zones to reflect the areal and depth distribution of the impacted soil and groundwater. The shallow Thermal Treatment Zone ISTD wells (Zone 1) will be placed between 10 and 18 fbgl; the deep Thermal Treatment Zone ISTD wells (Zone 2) will be placed between 18 and 50 fbgl.

For the Plume A source area, the vapor extraction wells (VEWs) will be co-located with the heater wells but will only extend to the top of the treatment zone (Figure 2). However, the shallow VEWs are open to a continuous sand pack. For Plume C, VEWs will fully penetrate the treatment zone and be spaced 13 to 15 feet from the heaters. Two shallow (1.5 fbgl) horizontal VEWs will prevent vapors from moving to the nearby buildings (Figure 3).

For both the Plume A and C source areas, temperature monitoring points will be installed at various locations across the treatment zone and will fully penetrate the treatment zone (Figures 2 and 3). Each temperature monitoring point will consist of thermocouples vertically spaced at 5-foot intervals.

To prevent cooling and re-condensing of the VOCs in the upper part of the vadose zone at the Plume A source area, an insulated cover will be placed at grade and overlap the remediation area

<sup>&</sup>lt;sup>2</sup> TerraTherm, Inc. 2017. Basis of Design Report, Former Schilling Air Force Base, Salina, Kansas. Dated January 18, 2017.
by 5 to 8 feet. The Plume C source area will not require an insulated cover since the treatment zone does not extend to grade.

Plume	Remediation Area (ft <sup>2</sup> )	ISTD Remediation Interval (fbgl)	Remediation Volume (yd <sup>3</sup> )	Number of Heater Wells	Number of VEWs	Number of Temperature Monitoring Wells
А	1,738	0 - 50	3,219	22	22	4
C <sub>Zone 1</sub>	2,003	10 - 18	593	8	4	6
C <sub>Zone 2</sub>	3,199	18 - 50	3,791	27	6	0

The following table summarizes the ISTD system for the Plume A and C source areas:

The Plume A source area remediation will occur first, then the treatment equipment will be moved to the Plume C source area. Preliminary calculations indicate a remediation (heating) schedule of 154 days for Plume A and 238 days for Plume C to meet the ATGs. This schedule does not include mobilization, permitting, site restoration, demobilization, or reporting.

To monitor remediation progress, Dragun will sample and test soil in the remediation zone at one-third and two-thirds of the expected remediation duration.

Dragun will develop a sampling plan consistent with the Kansas Department of Health and Environment (KDHE) requirements for verification soil sampling and analysis.

Based on the footprints and depths of the treatment zones, the anticipated confirmatory groundwater/soil sampling and analysis plan will include:

- Plume A: four randomly-located borings with up to five samples collected and tested (for VOCs) from each borehole
- Plume C: nine randomly-located borings with up to five samples collected and tested (for VOCs) from each borehole

At the completion of the remediation, Dragun will ensure that the remediation wells are abandoned according to KDHE requirements.

# **EXCAVATION AND DISPOSAL**

Overburden soil excavation with off-site disposal will be implemented for the Plume B Source Area east of Scanlan Drain (Figure 4). Note that this area of impacted soil is not the main source of groundwater impacts in Plume B. However, soil concentrations in this area exceed the Remedial Goals (RGs) and will be removed. Soil excavation with off-site disposal is the preferred remedial approach mainly because of the relatively-shallow depth of excavation (approximately 10 to 15.5 fbgl), excavation equipment is readily available, and there are no adjacent structures. In addition, observed VOC concentrations in soil are not indicative of a characteristic hazardous waste; therefore, the excavated soil can likely be disposed locally as a nonhazardous waste.

Figure 4 shows the proposed excavation area. Overburden soil will be excavated from an area of approximately 19,000 square feet down to the bedrock surface (ranging from 10 to 15.5 fbgl). The total soil volume for remediation is estimated as 8,200 cubic yards.

Excavated soil will be temporarily stockpiled on site in a secure area and tested for waste characterization at a frequency consistent with KDHE requirements. Once the waste soil is confirmed non-hazardous, it will be transported to an appropriate local landfill for disposal. Any soil suspected to be characteristically hazardous will be segregated, tested, and, if confirmed, disposed at an appropriate facility.

Although Figure 4 shows that the proposed excavation will intersect the water table, we do not anticipate significant groundwater accumulation because of the low permeability of the soil. Dewatering of the excavation will be conducted as needed. Pumped water will be temporarily stored on site, tested for VOCs, and disposed appropriately based on the test results.

The anticipated confirmatory soil sampling and analysis plan will include:

- Excavation perimeter verification wall sample frequency consistent with KDHE requirements.
- Floor samples will not be collected because excavation to the bedrock surface is planned. Should any portion of the excavation terminate at a depth above the bedrock, floor samples will also be collected and tested consistent with KDHE requirements.
- Soil samples tested for VOCs.

Following verification that the removal of the impacted soil is complete, the excavation will be backfilled to ground surface with clean soil, compacted, and landscaped consistent with the original conditions.

The Plume B Source Area soil excavation is estimated to require nine weeks.

## DIRECTED GROUNDWATER RECIRCULATION

Directed Groundwater Recirculation (DGR) technology will be implemented to meet the RGs or ATGs, depending on location,<sup>3</sup> for VOC and PFAS-impacted groundwater in the overburden in

<sup>&</sup>lt;sup>3</sup> See Section 2.5 of the Feasibility Study, Revision 2 for details of the ATGs and RGs.

OU1 and OU2. The framework for the DGR system is provided in Olsson's "Directed Groundwater-Recirculation System Basis of Design Report," dated July 2018.<sup>4</sup> The conceptual configuration of the DGR system in the Olsson report has been updated in this Remedial Design, Phase 1. The Remedial Design, Phase 1 DGR conceptual system configuration is shown on Figure 5. The Remedial Design, Phase 1 incorporates extraction and injection well locations and pumping rates Dragun determined using the groundwater flow model for the Site (Dragun, 2018a<sup>5</sup>).

DGR is essentially a refined version of pump-and-treat remediation in which treated groundwater is strategically injected back into the aquifer through injection wells to expedite remediation by (1) enhancing the flushing of the contaminants from the aquifer, (2) pushing contaminants towards the extraction wells, (3) adaptively managing the extraction and injection to maximize mass removal, and (4) adding amendments to the injected water to promote in situ remediation.

Figures 1 and 5 show the locations of the proposed DGR groundwater remediation. The initial DGR locations will focus on areas with the highest VOC and per- and polyfluoroalkyl substances (PFAS) concentrations. For each DGR array, pumping wells will be placed inside the high-concentration areas, and injection wells will be installed around the perimeter.

Part of the DGR strategy is to use system-performance data to maximize the mass removal efficiency of the system by periodically optimizing the extraction and injection-well pumping rates and locations during the remediation. This strategy is especially helpful in promoting diffusive exchanges between higher and lower-permeability zones in both the overburden and bedrock. With predominantly low-permeability geology near the VOC sources and releases that are over 50 years old, we expect that back diffusion of the VOCs from the low-permeability materials (matrix diffusion) will serve as a limiting factor in reaching the remedial objectives. By injecting "clean" treated water and drawing it through the remediation zone, the concentration gradient between the permeable and low-permeability zones will be optimized, resulting in an increased rate of mass flux from matrix diffusion.

#### **Remediation Well Design**

The groundwater-collection system will include 32 extraction wells distributed amongst Plumes A-D, F, and G. Of these, 24 will be overburden wells (7 standard bore and 17 large bore, Plumes A-D, F, and G) and 8 will be bedrock wells (Plumes A and G). The groundwater injection-well system will include 96 overburden injection wells.

<sup>&</sup>lt;sup>4</sup> Olsson Associates. 2018. Directed Groundwater-Recirculation System Basis of Design Report. Prepared for Former Schilling Air Force Base, Salina, Kansas. Dated July 2018.

<sup>&</sup>lt;sup>5</sup> Dragun Corporation. 2018a. Groundwater Modeling Report, Revision 2, Former Schilling Air Force Base, Salina, Kansas. Dated May 21, 2018.

The default design for the five types of remediation wells will vary depending on their purpose:

- Overburden groundwater extraction wells will be 6-inch-diameter wells with 5-foot-long screens placed at the base of the overburden and with sand packs extending upward to within 2 feet of the water table.
- At 17 selected locations, the overburden groundwater extraction well will be a 6-inchdiameter well completed in a 60-inch-diameter borehole filled with sand and with a 5 to 10-foot-long screen placed at the base of the overburden (large bore wells).
- Bedrock groundwater extraction wells will be 6-inch diameter wells with long screens (20-30 feet) that extend vertically throughout the impacted groundwater (assumed greater than 10 micrograms per liter [µg/L] trichloroethylene [TCE] or combined TCE, tetrachloroethylene [PCE], and carbon tetrachloride [CT] concentration) and doublecased in areas where the overburden groundwater has significant impacts.
- Overburden groundwater injection wells will be 6-inch-diameter wells with screens that almost fully penetrate the saturated zone.

The construction details for the default design remediation wells are summarized in the following charts:

OU	Plume	# of Wells	Well Diameter (inches [in]))	Well Screen Length (feet [ft])	Bottom Depth (fbgl)	Sand Pack (ft)
1	А	2	6	5	22	13
1	В	3	6	5	42	32
1	С	4	6	5	61	49
1	D	3	6	5	59	35
2	F1	2	6	5	39	29
2	F2	2	6	5	38	27
2	F3	2	6	5	40	28
2	G	6	6	5	32	16
in = inc	hes; $ft = feet;$	; fbgl = feet be	low ground level			

Typical Overburden Groundwater Extraction Well Details

OU	Plume	# of Wells	Well Diameter (in)	Well Screen Length (ft)	Bottom Depth (fbgl)	Sand Pack (ft)	Double Casing to (fasl)	
1	Α	5	6	20	40	20	20	
2	2 G 3 6 30 80 30 40							
in = in	ches; ft = f	eet; fbgl =	feet below groun	d level; fasl = feet a	bove sea level			

OU	Plume	# of Wells	Well Diameter (in)	Well Screen Length (ft)	Bottom Depth (fbgl)	Sand Pack (ft)	
1	А	12	6	5	22	13	
1	В	8	6	5	42	32	
1	С	16	6	5	61	49	
1	D	12	6	5	59	35	
2	F1	8	6	5	39	29	
2	F2	8	6	5	38	27	
2	F3	8	6	5	40	28	
2	G	24	6	5	32	16	

Typical Overburden Groundwater Injection Well Details

The exact locations and screen depths of extraction and injection wells will be selected using field data and the Site groundwater model to minimize flushing times and limit hydraulic dead zones. Prior to installation of each extraction and injection well, we will advance a Geoprobe<sup>®</sup>-based hydraulic profiling tool (HPT) and membrane interface probe (MIP) to determine the depth intervals with higher-permeability zones and higher concentrations of contaminants.

If conventional wells prove problematic for recirculation, Contingency Plan A is to use recharge galleries or horizontal wells to inject the treated groundwater. Contingency Plan B is to discharge the treated groundwater to surface water under the National Pollution Discharge Elimination System (NPDES) permit.

#### **Anticipated Pumping and Injection Rates**

The following charts summarize the anticipated extraction and injection rates. Approximately 108 gallons per minute (gpm) of groundwater will be extracted, treated, amended, and then reintroduced into the subsurface. These anticipated rates are based on the Dragun (2018a) model, aquifer tests conducted at the Site (Dragun, 2018b<sup>6</sup>), and site observations.

		1		5			
OU	Plume	# of Extraction Wells	Extraction Rate (gpm)	Total Extraction (gpm)	# of Injection Wells	Injection Rate (gpm)	Total Injection (gpm)
1	Α	2	4	8	12	1.1	13.2
1	В	3	4-5	13	8	1.1-1.35	9.8
1	С	4	7.5	30	16	1.98	31.68
1	D	3	4	12	12	1.1	13.2
2	F1	2	2-2.5	4.5	8	0.6-0.73	5.32
2	F2	2	2-5	7	8	0.6-1.35	7.8
2	F3	2	2-5	7	8	0.6-1.35	7.8

Anticipated Extraction and Injection Rates – Overburden Wells

<sup>6</sup> Dragun Corporation. 2018b. Remedial Investigation Report (Revision 21), Former Schilling Air Force Base, Salina, Kansas. Dated May 16, 2018.

OU	Plume	# of Extraction Wells	Extraction Rate (gpm)	Total Extraction (gpm)	# of Injection Wells	Injection Rate (gpm)	Total Injection (gpm)
2	G	6	2.5-4	16.5	24	0.73-1.1	19
gpm =	gpm = gallons per minute						

OU	Plume	# of Extraction Wells	Extraction Rate (gpm)	Total Extraction (gpm)	# of Injection Wells	Injection Rate (gpm)	Total Injection (gpm)
1	A	5	0.5	2.5	0	0	0
2	G	3	2.5	7.5	0	0	0

#### Anticipated Extraction and Injection Rates – Bedrock Wells

#### **Groundwater Treatment and Amendments**

Olsson (2018) has prepared a conceptual design of the facilities and treatment equipment for the Site. During operation of the directed groundwater recirculation system, groundwater will be extracted with an emphasis on VOC mass removal. The extracted water will be treated ex situ using air stripping and carbon adsorption to remove VOCs and ion exchange to remove PFAS. The extracted groundwater will also be tested for other chemicals, such as chloride and nitrate, and, if warranted, will be treated appropriately prior to injection.

The treated water will be amended prior to reinjection to enhance the in situ biodegradation of VOCs. First, a membrane contactor will be used to remove dissolved oxygen added during the air-stripper treatment. Then, emulsified vegetable oil and lactate will be added to increase the rate of biological activity. The biological activity will be monitored and the amendments adjusted as part of the planned optimization of the system. The biological amendments will also address the matrix diffusion, as the amendments will diffuse into the low-permeability materials and promote more rapid biodegradation within the matrix. Finally, bromide will be added to the treated and amended groundwater to enable tracking of the injected water.

#### **Remediation Monitoring**

The following monitoring will be conducted during the operation of the DGR system:

• Groundwater elevations – Transducers will be installed in the extraction and injection wells to monitor water levels. These data will be used to optimize extraction and injection rates. In addition, groundwater elevations at monitoring wells within the treatment zone will be monitored periodically to demonstrate inward flow from the perimeter of the treatment zone.

- Treatment system water quality Samples will be collected and tested from various points within the groundwater-treatment system to monitor the performance of the treatment system equipment.
- Extraction well groundwater quality Samples will be collected and tested periodically from extraction wells. These data will be used to optimize the DGR system.
- Monitoring well groundwater quality Samples will be collected and tested periodically from the monitoring-well network at the Site to track the progress of the remediation. These data will also be used to optimize the DGR system.
- Additional groundwater quality monitoring Samples will be collected from temporary wells or using downhole equipment (such as Geoprobe<sup>®</sup> SP-16) when needed to support the evaluation of the DGR system optimization.

#### Decommissioning

At the completion of the remediation, the remediation wells will be abandoned according to KDHE requirements.

## MONITORED NATURAL ATTENUATION

Monitored Natural Attenuation (MNA) is the process by which dilution, volatilization, biodegradation, adsorption, and chemical reactions with subsurface materials progress naturally to reduce contaminant concentrations. Monitored natural attenuation is planned for the downgradient portions of Plumes A-D, F, and G and Plumes E, I, J, and K. The rationale for the selection of MNA for Plumes I, J, and K is presented in the Feasibility Study, Revision 2.

For the downgradient portions of Plumes A-D, F, and G, we expect that the combination of the natural processes and removal of the contaminant source (through implementation of the DGR system) will remediate the groundwater plumes. Contaminant transport modeling supporting the application of MNA to the downgradient plumes is presented in Appendix A.

Plume E consists of relatively low concentration impacts compared to Plumes A-D, F, and G. We expect MNA to remediate the Plume E groundwater to the RGs.

Also, as discussed below, permeable reactive barriers are planned at the downgradient ends of Plumes D, E, F, and G to prevent further migration of the plumes.

Should the monitoring in the areas that MNA is planned show that concentrations are not declining as anticipated, contingency remedial options include expansion of the DGR system and targeted in situ remediation. Institutional controls (land use restrictions) may also be considered.

#### PERMEABLE REACTIVE BARRIERS

Seven Permeable Reactive Barriers (PRBs) are proposed for contaminant source-area control and groundwater remediation (Figure 1). The treatment barriers are an in situ remediation technology that degrades and removes contaminants as impacted groundwater passes through the barrier. Based on various physical factors, such as depth, geology, and construction equipment limitations, the treatment barriers will be installed using (1) excavation and then placement of reactive material (emplaced barrier) or (2) injection of the reactive material (injected barrier).

The reactive material to be used in the PRBs is zero-valent iron (ZVI). ZVI reduces the chlorinated volatile organic compounds (CVOCs) in groundwater that flows through the PRB. ZVI is a fine-grained powder that is added to a solution to create the PRB. The small grain size of the ZVI creates a large surface area that enhances CVOC degradation.

		Romediation Barrier	Proposed 1	Proposed Barrier Dimensions (ft)			
OU Plume		Кетешинон Багнег Туре	Length	Depth to Top	Depth to Bottom	Construction	
1	D	Leading edge barrier	600	30	45	Injection	
1	Е	Leading edge barrier	300	15	45	Injection	
2	F (F1)	Source barrier	200	5	45	Emplaced	
2	F (F2)	Leading edge barrier - south	500	35	50	Injection	
2	F (F3)	Leading edge barrier - north	300	22	50	Injection	
2	G	Source barrier	400	23	35	Emplaced	
2	G	Leading edge barrier	300	15	30	Injection	

Figure 1 shows the proposed locations of the PRBs. Preliminary PRB dimensions based on the results of the Remedial Investigation<sup>7</sup> are summarized below:

#### **Pre-PRB Construction Investigation**

Additional geologic and groundwater chemical data will be required to refine the final PRB dimensions. The preliminary dimensions are based on the distribution of CVOCs and permeable material zones that would be amenable to injection reported in Dragun (2018).

Prior to construction, more detailed information will be obtained using HPT and MIP borings advanced. The HPT data will determine the depth distribution of permeability, and the MIP data will determine the depth distribution of impacted groundwater. Groundwater samples will then

<sup>&</sup>lt;sup>7</sup> Dragun Corporation. 2018. Remedial Investigation Report, Revision 1, Former Schilling Air Force Base, Salina, Kansas. Prepared for Salina Public Entities. Dated February 8, 2018.

be collected from selected depth intervals at each HPT/MIP location to confirm the MIP information.

This investigation will include:

- HPT/MIP probes advanced at a 50-foot spacing along each proposed treatment barrier alignment. The MIP data will be used to select confirmatory groundwater sample intervals.
- Up to two groundwater samples will be obtained from each HPT/MIP location using temporary groundwater sampling techniques (i.e., SP-16 or temporary monitoring well). The groundwater samples will be tested for VOCs at a laboratory.

Geologic and chemical-distribution information will be synthesized to determine the final PRB dimensions. The following table summarizes the PRB investigation quantities:

OU	Plume	Barrier Type	Barrier Length (feet)	No. of Probes	Maximum No. of Groundwater Samples
1	D	Leading edge barrier	600	13	26
1	Е	Leading edge barrier	300	7	14
2	F (F1)	Source barrier	200	5	10
2	F (F2)	Leading edge barrier - south	500	11	22
2	F (F3)	Leading edge barrier - north	300	7	14
2	G	Source barrier	400	9	18
2	G	Leading edge barrier	300	7	14
				59	118

The actual quantity of HPT/MIP probes, probe depths, and groundwater samples may be modified based on observed subsurface conditions.

The estimated schedule for the investigation is as follows:

OU	Plume	Barrier Type	Barrier Length (feet)	Estimated Investigation Duration (Days)
1	D	Leading edge barrier	600	3
1	Е	Leading edge barrier	300	2
2	F (F1)	Source barrier	200	2
2	F (F2)	Leading edge barrier - south	500	2
2	F (F3)	Leading edge barrier - north	300	2

2	G	Source barrier	400	2
2	G	Leading edge barrier	300	2
				15

#### PRB Details

#### **Emplaced PRBs**

Two of the seven PRBs will be installed by excavation equipment (emplaced). The two PRBs will reduce chemical concentrations immediately downgradient of the source areas for Plumes F and G (Figure 1)

The emplaced PRBs will be installed by cut-and-fill methods. A 2- to 3-foot-wide trench will be excavated to the target depth. The trench will be backfilled with a biodegradable slurry of ZVI, clean sand, and guar gum to the elevation required to keep the trench open. The trench spoils will be placed on each side of the trench to create a berm to allow for the slurry to be extended above the original ground surface if necessary. Any extra spoils will be transported and disposed according to the Soil Management Plan.<sup>8</sup>

The slurry will be prepared above ground in mixing tanks, stored in frac tanks, and used as needed. The slurry will be mixed using a cement-mixing truck or by turning with an excavator until a homogeneous mixture is obtained and confirmed by magnetic separation analysis. An excavator will be used to place the slurry at the base of the trench to minimize separation of the ZVI and sand during settlement. The slurry will be placed from the bottom of the trench to approximately 2 feet above the water table. The slurry will then be covered by a geosynthetic cloth and stockpiled "clean" overburden.

Based on Plume F1 chemical concentrations and groundwater velocity, the treatment barrier will be approximately 3 feet thick. The slurry will consist of clean silica sand, biodegradable guar, and ZVI in a ratio of 25% ZVI and 75% sand/guar. For Plume G, higher source contaminant concentrations have been observed requiring an increased ZVI volume of up to 75% ZVI and 25% sand/guar. The Plume G PRB will also have an approximate thickness of 3 feet.

Installation is estimated to require 10 days for Plume F and 30 days for Plume G. Additional days will be required for mobilization, backfill of trench spoils, transport and disposal of excess spoils, grading, and demobilization of equipment.

<sup>&</sup>lt;sup>8</sup> Dragun Corporation, 2013. Interim Soil Management Plan, Environmental Contamination at the Former Schilling Air Force Base. Dated October 9, 2013.

The following is a summary of the emplaced PRB details:

Plume	Barrier Type	Barrier Length (ft)	Barrier Depth (ft)	% ZVI	Estimated Number of Installation Days
F	Source barrier	200	40	25	10
G	Source barrier	400	35	75	20

#### Injected PRBs

Five PRBs will be installed by injection methods to remediate the leading edges of the OU1 and OU2 plumes (Figure 1). Injection will occur over the permeable intervals identified during the pre-treatment barrier investigation.

The injected PRBs will have ZVI mixed with xanthum gum and water. The mixture will have a ZVI content of 30% to 35%. The resultant mixture will be injected into the subsurface via soil borings advanced to the barrier specific depth. Injection borings will be spaced at approximately 1.6 to 2.5 feet along the entire length of each treatment barrier with the objective to create a continuous, 10-foot-wide ZVI reaction zone through which the impacted groundwater will pass. In addition to the horizontal intervals, injection will occur at more than one depth interval (two to three intervals per boring).

Injection quantities per plume are summarized as follows:

Plume	Barrier Type	Barrier Length (ft)	Number of Injection Borings	Horizontal Spacing of Soil Borings (ft)	Number of Vertical Injection Intervals/Soil Boring	Total Injection Points/Barrier
D	Leading edge	600	366	1.6	3	1,098
E	Leading edge	300	121	2.5	2.5	303
F (F2)	Leading edge barrier - south	500	183	2.5	3	549
F (F3)	Leading edge barrier - north	300	203	1.6	3	609
G	Leading edge barrier	300	183	1.6	3	549
			1,056			3,108

The injected PRBs will be installed using a drill rig. The ZVI mixture will be mixed in portable cement-mixing tanks and stored in frac tanks at each PRB location. The following is the estimated injected PRB fieldwork schedule:

Plume	Barrier Type	Barrier Length (ft)	Number of Soil Borings	Days to Complete Injection Per PRB
D	Leading edge	600	366	63
Е	Leading edge	300	121	19
F (F2)	Leading edge barrier - south	500	183	40
F (F3)	Leading edge barrier - north	300	203	37
G	Leading edge barrier	300	183	37

The total time required for the PRB injections may be reduced by using multiple drill rigs and/or working at more than one PRB at a time.

# FIGURES





<b>CROSS-SECTION LEGEN</b>
SOIL SAMPLE INTERVAL
SAMPLING DATE

VERT. SCALE (fasl)

1260

- ABBREVIATIONS fasl = FEET ABOVE SEA LEVEL ND = NONDETECT
  (P) = PROJECTED
- NOTES
- and horizontally), except where observed in boreholes.
- 3. Approximate water table is assumed from water table
- **REMEDIAL DESIGN, PHASE 1** FORMER SCHILLING AIR FORCE BASE SALINA, KANSAS





# (SOUTHWEST)





FIGURE 3 **REMEDIAL DESIGN, PHASE 1** PLUME C SOURCE AREA, OU1 FORMER SCHILLING AIR FORCE BASE SALINA, KANSAS PROPOSED THERMAL SOIL TREATMENT

Dragun Corporation Environmental Advisors

Company, Inc., various dates.

3. Basis of Design Report by TerraTherm 1/18/2017.

C' (NORTHEAST)

TOP OF BEDROCK

CROSS-SECTION LEGEND

GROUNDWATER SAMPLE INTERVAL

SOIL SAMPLE INTERVAL

TCE CONCENTRATION

TCE CONCENTRATION

SAMPLING DATE

SAMPLING DATE

AQUIFER MATERIAL

AQUITARD MATERIAL

11/20/2014

320

11/20/2014 320

VERTICAL SCALE: 1"=5'

VERTICAL EXAGGERATION: 40:1

- STRATIGRAPHIC BOUNDARY (INTERPRETED)
- (APPROXIMATE) WATER TABLE OVERBURDEN (fasl) (8/17/2015)
  - PERMANENT WELL SCREEN

# ABBREVIATIONS

- 1. USACE = UNITED STATES ARMY
- CORPS OF ENGINEERS 2. fasl = FEET ABOVE SEA LEVEL
- 3. (P) = PROJECTED 4. TCE = TRICHLOROETHENE
- 5. μg/kg = MICROGRAMS PER
- KILOGRAM 6. μg/L = MICROGRAMS PER LITER

# NOTES

- 1. Soil chemistry data are from September 11, 2014, to October 28, 2014.
- 2. Soil analytical results are reported in  $\mu$ g/kg. 3. Soil sample DSB1074C-23.2 had a
- cis-1,2-Dichloroethylene concentration of 7,280 µg/kg. 4. An In Situ Bioremediation Pilot Test was conducted by
- USACE in 2006-2007 in this area. Historical data (such as 1C01AG) may not represent current conditions. 5. Groundwater analytical results are reported in  $\mu$ g/L.
- 6. All geological contacts are approximate (both vertically and horizontally), except where observed in boreholes.
- Ground surface is assumed between borings/wells. 8. Approximate water table is assumed from water table map where there are no permanent well data.



	LEGEND
Ø S-060	HISTORIC SOIL BORING
+ DSB	SOIL BORING

#### **ABBREVIATIONS**

2.

3.

OU = OPERABLE UNIT 1.

- SAFB = SCHILLING AIR FORCE BASE
- TCE = TRICHLOROETHENE

63

#### **CROSS-SECTION LEGEND** SOIL SAMPLE INTERVAL AND CONCENTRATION $\mu g/kg$

#### **ABBREVIATIONS**

- EOB = END OF BORING 1. fasl = FEET ABOVE SEA LEVEL 2.
- 3. (P) = PROJECTED
- TCE = TRICHLOROETHENE





APPENDIX A Analysis of Downgradient Overburden Groundwater Quality In Response to Source Remediation Efforts at the Former SAFB

#### INTRODUCTION

This report summarizes Dragun Corporation's analysis of the downgradient overburden groundwater quality following implementation of the directed groundwater recirculation (DGR) system included in the Remedial Design, Phase 1 for the former Schilling Air Force Base (SAFB) site (the Site). Our analysis is conceptual and aided by two screening-level groundwater transport models, BIOCHLOR (Aziz et al., 2002)<sup>1</sup> and REMChlor (Falta et al., 2007)<sup>2</sup> BIOCHLOR and REMChlor are products of research funded by the United States Environmental Protection Agency.

According to Aziz et al. (2002), BIOCHLOR is an Excel-based "screening model that simulates remediation by natural attenuation (NA) of dissolved solvents in groundwater ... based on the Domenico analytical solute transport model ..." BIOCHLOR can simulate 1-D advection, 3-D dispersion, biotransformation, and reductive dechlorination. We used BIOCHLOR to simulate the growth of the plumes from 1950 to 2020. We used BIOCHLOR to simulate the growth of the plumes because BIOCHLOR addresses the relevant plume formation processes and is more stable than REMChlor.

In general, we used the hydraulic parameters from the MODFLOW model developed for the Site (Dragun, 2018)<sup>3</sup> as input parameters in a BIOCHLOR model for Plume G (see Figure 1). We modeled Plume G as it represents the worst-case scenario with respect to groundwater velocity and concentrations. We adjusted the input parameters from MODFLOW as needed, used literature values, and our judgement based on past investigations to have BIOCHLOR reasonably replicate the observed 2018 (or thereabout) groundwater concentrations. Attachment A provides the BIOCHLOR model inputs and outputs for Plume G. The field data locations for BIOCHLOR are indicated on Figure 1.

We then used the BIOCHLOR parameters as input into the REMChlor model to simulate the formation of Plume G and then to predict groundwater concentrations before and after source remediation. BIOCHLOR cannot be used to simulate the remediation. According to Falta et al. (2007), REMChlor is an Excel-based analytical model that can simulate 1-D flow and transport with various degrees of source remediation and plume degradation that can change along the plume. We used REMChlor in two steps.

<sup>&</sup>lt;sup>1</sup> Aziz CE, Newell CJ, and Gonzales JR. 2002. BIOCHLOR, Natural Attenuation Decision Support System, Version 2.2, March 2002.

<sup>&</sup>lt;sup>2</sup> Falta RW et al. 2007. REMChlor, Remediation Evaluation Model for Chlorinated Solvents, User's Manual Version 1.0, September 2007.

<sup>&</sup>lt;sup>3</sup> Dragun Corporation. 2018. Groundwater Modeling Report, Revision 2, Former Schilling Air Force Base, Salina, Kansas. May 2018.

First, we simulated the growth of Plume G between 1950 and 2020. We adjusted the input parameters obtained from the BIOCHLOR model as needed, used literature values, and our judgement based on past investigations for the REMChlor input parameters to simulate plume centerline concentrations in 2020 (Figure 2). We used REMChlor to determine when Plume G would have reached the planned location of the downgradient end of the DGR system (determined from the Olsson design documents). Attachment B provides the REMChlor model input.

Second, we used REMChlor again with the same input parameters but starting at the planned location of the downgradient end of the DGR system in the year the plume reached that location. We ran this second model to 2020 and adjusted the source concentration as needed to match the observed 2020 data (Figure 3). We then used the model to determine when the downgradient groundwater would have less than 5 micrograms per liter ( $\mu$ g/L) (carbon tetrachloride [CT]) everywhere.

The remainder of this report discusses the conceptual models, assumptions, and results for each plume.

## **CONCEPTUAL MODEL AND BIOCHLOR/REMChlor ASSUMPTIONS**

#### Simulation of Source Remediation

The Remedial Design, Phase 1 includes DGR systems for overburden Plumes D, F1, F2, F3, and G focused on the high concentration (> approximately 100  $\mu$ g/L) emplaced Permeable Reactive Barriers (PRBs) downgradient of the Plume F1 and G sources and injected PRBs at/near the ends of Plumes D, E, F2, F3, and G.

The emplaced PRBs at/near the source in Plume F1 and Plume G will begin to function immediately upon completion. In the REMChlor simulations, remediation is assumed to be located at the source (the most-upgradient point in the plume).

The DGR systems are intended to remediate areas of the overburden aquifers with the most impacted groundwater over a 20-year period. Soon after operation begins, the DGR systems will hydraulically control the most-impacted groundwater (> approximately 100  $\mu$ g/L) such that the downgradient portions of the plume will no longer receive the most-impacted groundwater. Once the most-impacted groundwater is hydraulically controlled, concentrations in the plume beyond the hydraulic control of the DGR system will gradually dissipate due to advection, dispersion, and the degradation processes (NA).

#### Matrix Diffusion

Matrix diffusion (the movement of chemicals into low-permeability zones during plume development and the movement of chemicals out of the low-permeability zones during remediation) occurs throughout the plumes but is likely to be a significant factor only in the source areas and the adjacent, most-contaminated parts of the plume.

We attempted to model the Site using REMChlor-MD<sup>4</sup>, which addresses matrix diffusion; however, we had several issues with the stability of the model. We chose to use REMChlor without the matrix diffusion package. In our opinion, matrix diffusion is not likely to be significant in the downgradient portion of the plumes that we are interested in.

#### General Discussion of REMChlor Input Parameters

Attachment B provides the REMChlor inputs for overburden Plume G. These are discussed in general below.

<u>Source Parameters:</u> We assumed the concentration at the source based on the observed nearsource groundwater concentrations. We also assumed the mass of contaminant at the source and "gamma," which indicates how the source mass changes with time before remediation. We selected a gamma value of zero, which indicates a constant source mass. The source mass and the source mass change terms become irrelevant to the downgradient plume after the source remediation begins.

<u>Source Dimensions</u>: For source width and depth, we used the plume maps and hydrostratigraphic cross-sections in the Remedial Investigation (RI) report<sup>5</sup> as a guide.

Initially, we used the hydraulic conductivity from the MODFLOW model (4 x  $10^{-3}$  centimeters per second [cm/s]), hydraulic gradients determined from the various groundwater flow maps in the RI, and an effective porosity of 0.2 associated with the particle tracking in the MODFLOW model for the BIOCHLOR models. We adjusted the input parameters as needed to match the observed groundwater chemistry data. For the observed groundwater chemistry data, we used the 2018 data where possible and 2014 or 2015 data from temporary wells where there were no 2018 data. We called these the "2020 data" for simplicity. We then used the BIOCHLOR parameters as input for the REMChlor models.

<sup>&</sup>lt;sup>4</sup> Farhat SK, Newell CJ, Falta RW, and Lynch K. 2018. User's Manual, A Practical Approach for Modeling Matrix Diffusion Effects in REMChlor, ESTCP Project ER-201426. June 2018.

<sup>&</sup>lt;sup>5</sup> Dragun Corporation. 2018. Remedial Investigation Report (Revision 1), Former Schilling Air Force Base, Salina, Kansas. May 2018.

<u>Source Remediation</u>: We assumed the DGR system captured approximately 95 percent of the most-impacted groundwater and the remediation occurred from year 71 to year 72 (2021 to 2022). We assumed no source decay due to processes other than dissolution and flushing.

<u>Transport Parameters:</u> For all of the REMChlor simulations: (1) we used the retardation factor from the MODPATH simulations in the RI; that is, 5.5, regardless of the chemical, (2) we used 500 stream tubes, a factor that provides a smoother output graph in the simulation, (3) we used a "sigmav" factor of 0.44721, which results in a longitudinal dispersivity of 0.1 of the travel distance, and (4) we used "vMin" and "vMax" of 0.5 and 1.5, respectively (see REMChlor manual). We assumed "alphay" and "alphaz" values (transverse dispersivities) of 0.1 and 0.01 of the travel distance, respectively, and adjusted these as needed considering the observed plume dimensions.

<u>Simulation Parameters</u>: We used the same x, y, and z input for all the REMChlor simulations; these parameters control the output to produce centerline plume concentration-versus-distance plots.

<u>Decay Rate</u>: REMChlor allows various plume decay rate zones and times. Based on data in the RI, we assumed the lowest typical decay rate for all the target chemicals (0.3 1/year) provided in the REMChlor-MD manual but increased the decay rate in the downgradient portion of the plume to match observed groundwater chemistry data. We also assumed that there were no daughter products from primary chemicals in the plume ("yield" factors = 0).

## PLUME G MODEL RESULTS

Appendices A and B provide the model inputs and outputs for Plume G. Figure 1 shows the monitoring well locations used for observed chemistry data. For well nests and where there are temporary and permanent well data, we used the well with the highest observed concentration in the RI report.

Figure 2 plots the observed Plume G centerline CT concentrations and the REMChlor plume concentration-versus-distance output for 2020 after a release at the source in 1950. Figure 2 includes:

- 1. The observed data.
- 2. A vertical line indicating the location of the planned downgradient extent of the DGR system (this is for location comparison only; it is not included in the REMChlor model and does not affect the model results).
- 3. The REMChlor model results after 70 years (circa 2020) to evaluate how well the REMChlor model and observed data match.

4. The REMChlor model results after 40 years (circa 1990), which is the time when the REMChlor model Plume G reached the location of the planned downgradient extent of the DGR system.

Figure 3 plots the results of the second REMChlor simulation, which runs from 1990 through 2200. This simulation uses the same input parameters as the first REMChlor simulation except:

- 1. The source location is now assumed to be the downgradient end of the planned DGR system.
- 2. The "release" occurred in about 1990 when Plume A reached the location of the planned downgradient extent of the DGR system.
- 3. The source concentration is assumed to be approximately 100  $\mu$ g/L (because that was the planned extent of the DGR system capture). This factor was adjusted as needed to calibrate to the observed 2020 data.

Figure 3 has a vertical line indicating the location of the planned downgradient PRB (this is for location comparison only; it is not included in the REMChlor model and does not affect the model results). Figure 3 also has a horizontal line indicating the target cleanup concentration of  $5 \mu g/L$ .

Figure 2 indicates the following:

- 1. The REMChlor model provides a reasonably good approximation of the development of Plume G to 2020. The match with the observed data at DTW1218 is not good, but this may be due to DTW1218 being off the centerline of the plume.
- 2. Plume G reached the location of the planned downgradient extent of the DGR system approximately about 40 years (in approximately 1990) after the release at the source (in 1950).

Figure 3 indicates the following:

- 1. The REMChlor model provides a reasonably good approximation of the development of downgradient part of Plume G (beyond the planned location of the DGR system) between 1990 and 2020.
- 2. Once the DGR system captured the most-impacted groundwater (assumed 2021), the downgradient portion of Plume G reaches 5  $\mu$ g/L everywhere by approximately 2060.
- 3. The planned PRB provides protection for groundwater downgradient to offset any uncertainty in the modelling.

#### SUMMARY AND CONCLUSIONS

This report summarizes Dragun Corporation's analysis of the downgradient overburden groundwater quality following implementation of the Remedial Design, Phase 1 DGR system plan at the former SAFB site. Our analysis involved two screening-level groundwater transport models, BIOCHLOR and REMChlor. We simulated Plume G; Plume G is the worst-case scenario plume at the Site.

First, we used BIOCHLOR with input data from the RI, the modeling report, and the literature to determine transport parameters that could reasonably simulate the growth of Plume G between 1950 and 1970. Second, we used the BIOCHLOR parameters as initial input for REMChlor to produce Plume G because BIOCHLOR cannot simulate remediation. Finally, to simulate the effect of source remediation by the DGR system (which captures the most-impacted groundwater), we used REMChlor again on only the downgradient part of Plume G.

This modeling is meant to be a screening-level demonstration of the effect of source remediation and the need for downgradient injected PRBs. There are several major assumptions involved in our modeling.

- First, we assumed matrix diffusion does not affect groundwater concentrations during plume development. We know matrix diffusion is actually very important in, and near, the source areas. However, during DGR, these areas are isolated from the downgradient areas of the plume, and after DGR, these source areas are remediated. Therefore, matrix diffusion in the source areas should not significantly affect the model predictions.
- Second, matrix diffusion is not likely a major factor in the downgradient area of the plume. We believe this is a reasonable assumption since the downgradient portions of the plume have low contaminant concentrations. Diffusion is driven by concentration gradient, and the lower downgradient concentrations create a lesser gradient than that observed in the source area. If matrix diffusion in the downgradient area is more significant than expected, this factor will cause the actual time for cleanup of the downgradient part of the plume to be greater than the model predictions.
- Finally, we assumed low-degradation rates in the plumes. This assumption is supported by the RI. If the degradation rates are higher than expected, this factor will cause the actual time for cleanup of the downgradient part of the plume to be less than the model predictions.

The planned downgradient-injected PRBs are intended to prevent further migration of the plumes until the source areas are remediated and to allow for error due to model assumptions.

# FIGURES





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ATTACHMENT A BIOCHLOR Model Inputs and Outputs for Plume G



ATTACHMENT B REMChlor Inputs for Overburden Plume G



#### Table 1. Remedial Dedign, Phase I Cost Estimate

Former Schilling Air Force Base Salina, Kansas 6/1/2020

Activity	Activity Cost	Detail Attachment
Remediation of Source Areas	\$12,000,000	B-1, B-3.1, B-3.2
Control of Migration From Source Areas	\$4,400,000	B-4
Remediation of Groundwater Plumes	\$37,400,000	B-6
Prevention of Plume Migration	\$3,500,000	B-8
Groundwater Monitoring	\$5,400,000	C-1
Monitoring Well Maintenance and Repair	\$800,000	C-2
Indoor Air Monitoring	\$1,500,000	C-3
Database Management	\$1,600,000	C-5
Reporting	\$2,300,000	C-6
KDHE Oversight	\$600,000	C-7
Monitoring Well Abandonment	\$900,000	C-8
Community Involvement, Administration, Legal, and Insurance	\$1,300,000	C-9

TOTAL \$71,700,000

Notes:

1. Costs shown are for 22-year remediation period (2-year source remediation and groundwater remediation installation, 20-year groundwater remediation operation) followed by an 8-year monitoring period near the remaining source control measures in Plume F and Plume G.

2. A contingency of 15% is included in this cost estimate. The total contingency amount is \$9,400,000.

3. Future costs have not been discounted to present value.

4. Subtotals and totals are rounded to reflect the budgetary nature and level of certainty inherent in this cost estimate.

# **Investment & Project Cash Flow**

# Inflation Rates by Task and 0.001% Investment Rate

Assum	ntion

Present Value Project Cost		71,700,000
Project Expenses		60,945,000
Contingency	15.00%	10,755,000
Federal Settlement (Lump Sum)		67,882,825
Local Contribution		-
Contingency used to balance projected shortfall due to inflation out pacing investment income		5,142,449
Contingency used to fund insurance coverage deductible		250,000
Revised Contingency (% of original cost)	7.48%	5,362,551
Estimated Annual Investment Rate		0.001%

	Less: Project Costs Paid							
					Aggregate	Future	Add:	
	Beginning	(	Costs (2020 \$)		Inflation	Project	Investment	Ending
Year	Balance	Project	Contingency	Total	Factor*	Cost	Return	Balance
1	67,882,825	14,720,643	1,355,654	16,076,297	1.00000	16,076,297	598	51,807,126
2	51,807,126	24,886,779	2,291,875	27,178,654	1.00000	27,178,654	382	24,628,854
3	24,628,854	1,339,662	123,372	1,463,034	1.00950	1,476,929	239	23,152,165
4	23,152,165	1,339,662	123,372	1,463,034	1.01333	1,482,534	224	21,669,855
5	21,669,855	1,307,189	120,382	1,427,571	1.01704	1,451,899	209	20,218,165
6	20,218,165	979,561	90,210	1,069,771	1.02125	1,092,500	197	19,125,862
7	19,125,862	979,561	90,210	1,069,771	1.02517	1,096,699	186	18,029,348
8	18,029,348	969,193	89,255	1,058,448	1.02902	1,089,166	175	16,940,357
9	16,940,357	969,193	89,255	1,058,448	1.03297	1,093,349	164	15,847,173
10	15,847,173	969,193	89,255	1,058,448	1.03694	1,097,552	153	14,749,774
11	14,749,774	969,193	89,255	1,058,448	1.04094	1,101,777	142	13,648,139
12	13,648,139	969,193	89,255	1,058,448	1.04495	1,106,023	131	12,542,247
13	12,542,247	900,028	82,885	982,914	1.04780	1,029,896	120	11,512,471
14	11,512,471	900,028	82,885	982,914	1.05175	1,033,782	110	10,478,799
15	10,478,799	900,028	82,885	982,914	1.05573	1,037,688	100	9,441,210
16	9,441,210	1,460,113	134,465	1,594,578	1.03681	1,653,278	86	7,788,018
17	7,788,018	865,113	79,670	944,783	1.06631	1,007,428	73	6,780,663
18	6,780,663	865,113	79,670	944,783	1.07050	1,011,393	63	5,769,333
19	5,769,333	865,113	79,670	944,783	1.07472	1,015,377	53	4,754,009
20	4,754,009	865,113	79,670	944,783	1.07896	1,019,382	42	3,734,669
21	3,734,669	865,113	79,670	944,783	1.08322	1,023,406	32	2,711,295
22	2,711,295	865,113	79,670	944,783	1.08750	1,027,451	22	1,683,866
23	1,683,866	627,513	57,789	685,301	1.36609	936,186	12	747,692
24	747,692	53,763	4,951	58,714	1.02713	60,307	7	687,393
25	687,393	53,763	4,951	58,714	1.02836	60,379	7	627,021
26	627,021	53,763	4,951	58,714	1.02959	60,451	6	566,576
27	566,576	53,763	4,951	58,714	1.03083	60,524	5	506,057
28	506,057	53,763	4,951	58,714	1.03208	60,597	5	445,465
29	445,465	53,763	4,951	58,714	1.03333	60,670	4	384,799
30	384,799	245,013	22,564	267,576	1.43810	384,801	2	0
		60,945,000	5,612,551	66,557,550		67,886,374	3,549	

\* Inflation Rate for each individual component of project is provided on separate report. This investment and cash flow projection to be updated quarterly during life of the project.

# ENVIRONMENTAL INSURANCE POLICY PROPOSAL AND SUMMARY FOR FORMER SCHILLING AIR FORSE BASE ENVIRONMENTAL MATTER

Date:	June 2020
Named Insured:	Salina Public Entities
Address:	300 West Ash Street Salina, KS 67401
Additional Insureds:	City of Salina Salina USD 305 Salina Airport Authority Kansas State University
Carrier:	Ascot Specialty Insurance Company AM Best Rating – A XIV Stable
Policy Term:	5 Years from date of policy inception (Renewal process will begin on the 4 <sup>th</sup> Anniversary of the policy inception)
Policy Limit Options:	\$5,000,000 or \$10,000,000 or \$20,000,000 (limit is for the full 5-year term)
Deductible:	\$250,000 per occurrence
Premium:	\$5,000,000 - \$117,000 + \$7,020 = \$124,020 \$10,000,000 - \$164,200 + \$9,852 = \$174,052 \$20,000,000 - \$235,000 + \$14,100 = \$249,100 Kansas Surplus Lines Tax of 6% has been added for the total One-time payment for the full term of the policy
Covered of Location:	Salina Regional Airport and Airport Industrial Center, the site of the former Schilling Air Force Base 3237 Arnold Avenue, Salina KS 67401 Non-Owned Disposal Facilities
Coverages:	Applies to Pollution Events that commenced prior to the policy inception. Third Party Bodily Injury (On-site and Off-site) and Property Damage On, at, under or migrating from the covered location
# Key Exclusions:Environmental DamageClean-up CostsConstruction ActivitiesExpected or Intended Injury or DamageNoncompliance

Key Definitions:Bodily Injury - means physical injury, sickness, disease, building-related illness,<br/>mental anguish, shock or emotional distress, sustained by a person, including<br/>death resulting from any of these at any time. Bodily injury shall also include<br/>medical monitoring costs.

#### Property Damage means

a. Physical injury to or destruction of tangible property, including all resulting loss of use and diminished value of that property. All such loss of use and diminished value shall be deemed to occur at the time of the physical injury that caused it;
b. Loss of use and diminished value of tangible property that is not physically injured or destroyed. All such loss of use shall be deemed to occur at the time of the pollution event that caused it

**Pollutants** means any solid, liquid, gaseous or thermal irritant, or contaminant, including smoke, soot, vapor, fumes, acids, alkalis, chemicals, hazardous substances, hazardous materials, or waste materials, including medical, infectious and pathological wastes. **Pollutants** includes electromagnetic fields, **mold matter** and legionella pneumophila.

#### Pollution event means:

**a.** The discharge, dispersal, release, escape, migration, or seepage of **pollutants** on, in, into, or upon land, **mode of transportation**, structures on land or water, the atmosphere, any watercourse or body of water including surface water or groundwater;

- b. The presence of mold matter; or
- c. Misdelivery.

**Pollution event** includes the illicit abandonment of **pollutants** at any **location** which is owned or occupied by you provided that such abandonment was committed by parties other than an insured and without the knowledge of a **responsible insured**.

## Marketing Summary:

Carrier	Response
Ascot	Quote Provided
Allied World Assurance Company	PFOA/PFAS Exclusion
Sirius	Declined
Beazley	Declined
Chubb	Declined

Broker Information: Lockton Companies 444 West 47<sup>th</sup> Street, Suite 900 Kansas City, MO 64112 Matthew J. Pateidl, ARM Vice President 816-960-9465 mpateidl@lockton.com



Ascot Specialty Insurance Company 55 West 46th Street 26th Floor New York, NY 10036

Date:	May 21, 2020	Quote Reference#: 18556
Attn:	Matthew Pateidl Lockton Companies, LLC - Kansas C 444 West 47th Street Suite 900 Kansas City, MO 64112 mpateidl@lockton.com 816-960-9465	ity
RE: Named Insured & Mailing Address	<b>PRIME POLLUTION LIABILITY Pro</b> Salina Public Entities 300 West Ash Street Salina, KS 67401	posal For:
Policy Form: Policy Period:	PRIME POLLUTION LIABILITY Effective: TBD Expiration: TBD	
Issuing Company: Renewal of Policy Number:	Ascot Specialty Insurance Company New	

Dear Matthew:

We appreciate the opportunity to offer the following insurance proposal for the above captioned insured. Below is a summary of premiums, commission, terms and conditions of the proposal. Please note that this proposal is valid for 30 days.

	OPTION 1:		OPTION 2:		OPTION 3:	
Coverage:	Limit:	Deductible:	Limit:	Deductible:	Limit:	Deductible:
Coverage A	\$5,000,000	\$250,000	\$10,000,000	\$250,000	\$20,000,000	\$250,000
Covered Location						
Pollution Liability						
Coverage B	Not	N/A	Not Purchased	N/A	Not	N/A
Miscellaneous	Purchased				Purchased	
Pollution Liability						
Coverage C	Not	N/A	Not Purchased	N/A	Not	N/A
Emergency and	Purchased				Purchased	
Crisis Management						
Costs						
Coverage D	Not	N/A	Not Purchased	N/A	Not	N/A
Business Income	Purchased				Purchased	
and Extra Expense						

Policy Aggregate	\$5,000,000	N/A	\$10,000,000	N/A	\$20,000,000	N/A
Policy Premium	\$117,000		\$164,200		\$235,000	
(Excluding TRIA):						
Minimum Earned	100%		100%		100%	
Premium:						
Commission:	15.00%		15.00%		15.00%	
Policy Term:	5 years		5 years		5 years	

The Policy Premium amount stated above does not include any applicable surplus lines tax and fees. Surplus lines taxes, fees and filings are the sole responsibility of the broker.

The Policy Premium stated above does not include the premium for Terrorism Risk Insurance Act Coverage. Please see the attached Disclosure Statement regarding Terrorism Risk Insurance Act Coverage and the premium for such coverage. In the event that you choose to purchase Terrorism Risk Insurance Act Coverage, the Total Policy Premium will be the premium shown above plus the Terrorism Risk Insurance Act Coverage premium.

#### Schedule of Forms and Endorsements:

J.

Name	Form Number – Edition Date
Claims & Notice Reporting	EN AL PN 01 01 20
Prime Coverage Form	EN PR 00 01 04 20
Deductible including Supplementary Payments	EN PR 30 01 04 20
Manuscript Endorsement	MANUSCRIPT 1
Manuscript Endorsement	MANUSCRIPT 2
Manuscript Endorsement	MANUSCRIPT 3

#### Policy Coverage Highlights(if not amended by endorsement):

- Blanket Covered Locations (no scheduling required).
- Pollution coverage is on a full preexisting basis (no retro date) for on and off site bodily injury, property damage and environmental damage.
- Covered Locations includes NODS and Divested Locations.
- Business Income is included with a 72 hour waiting period. There is no waiting period for extra expenses.
- Newly Acquired locations are automatically included for Time-Element Pollution Events for 180 days.
- Pollution during Transportation and Scheduled Contractors Pollution is provided on an occurrence basis worldwide.
- Emergency Costs include crisis management costs and are included on a no fault basis.
- All Defense Expense is outside of the limit of insurance and the deductible.

#### **Conditions of the Proposal:**

This proposal is subject to receipt, review and acceptance of the following by the indicated date:

- 1. Written request to bind prior to the effective date.
- 2. Written request to accept or reject Terrorism Risk Insurance Act Coverage prior to the effective date.
- 3. Producer surplus lines license number prior to binding. We cannot issue a binder (or provide a policy number) without this information.
- 4. Final and executed Consent Decree with US Government

This proposal is an overview of terms and conditions offered. All coverage is subject to the terms and conditions of the policy form indicated. It is your responsibility to review the terms and conditions of the policy. This proposal and the terms and conditions of the policy may differ from specifications requested in the submission.

Thank you for your consideration of this proposal. If you have any questions or concerns, please feel free to contact me.

Sincerely,

Ted Marmaganis

Ted Mavraganis VP, Environmental Ted.Mavraganis@AscotGroup.com 646-978-9642

# POLICYHOLDER DISCLOSURE NOTICE OF <u>TERRORISM INSURANCE COVERAGE</u>

You are hereby notified that under the Terrorism Risk Insurance Act, as amended, you have a right to purchase insurance coverage for losses resulting from acts of terrorism. *As defined in Section 102(1) of the Act*. The term "act of terrorism" means any act or acts that are certified by the Secretary of the Treasury—in consultation with the Secretary of Homeland Security, and the Attorney General of the United States—to be an act of terrorism; to be a violent act or an act that is dangerous to human life, property, or infrastructure; to have resulted in damage within the United States, or outside the United States in the case of certain air carriers or vessels or the premises of a United States mission; and to have been committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

YOU SHOULD KNOW THAT WHERE COVERAGE IS PROVIDED BY THIS POLICY FOR LOSSES RESULTING FROM CERTIFIED ACTS OF TERRORISM, SUCH LOSSES MAY BE PARTIALLY REIMBURSED BY THE UNITED STATES GOVERNMENT UNDER A FORMULA ESTABLISHED BY FEDERAL LAW. HOWEVER, YOUR POLICY MAY CONTAIN OTHER EXCLUSIONS WHICH MIGHT AFFECT YOUR COVERAGE, SUCH AS AN EXCLUSION FOR NUCLEAR EVENTS. UNDER THE FORMULA, THE UNITED STATES GOVERNMENT GENERALLY REIMBURSES 85% THROUGH 2015; 84% BEGINNING ON JANUARY 1, 2016; 83% BEGINNING ON JANUARY 1, 2017; 82% BEGINNING ON JANUARY 1, 2018; 81% BEGINNING ON JANUARY 1, 2019 and 80% BEGINNING ON JANUARY 1, 2020, OF COVERED TERRORISM LOSSES EXCEEDING THE STATUTORILY ESTABLISHED DEDUCTIBLE PAID BY THE INSURANCE COMPANY PROVIDING THE COVERAGE. THE PREMIUM CHARGED FOR THIS COVERAGE IS PROVIDED BELOW AND DOES NOT INCLUDE ANY CHARGES FOR THE PORTION OF LOSS THAT MAY BE COVERED BY THE FEDERAL GOVERNMENT UNDER THE ACT.

YOU SHOULD ALSO KNOW THAT THE TERRORISM RISK INSURANCE ACT, AS AMENDED, CONTAINS A \$100 BILLION CAP THAT LIMITS U.S. GOVERNMENT REIMBURSEMENT AS WELL AS INSURERS' LIABILITY FOR LOSSES RESULTING FROM CERTIFIED ACTS OF TERRORISM WHEN THE AMOUNT OF SUCH LOSSES IN ANY ONE CALENDAR YEAR EXCEEDS \$100 BILLION. IF THE AGGREGATE INSURED LOSSES FOR ALL INSURERS EXCEED \$100 BILLION, YOUR COVERAGE MAY BE REDUCED

#### Acceptance or Rejection of Terrorism Insurance Coverage

\_\_ I hereby elect to purchase terrorism coverage for certified acts of terrorism for a premium of <u>3%</u> of the Policy Premium.

\_\_ I hereby decline to purchase terrorism coverage for certified acts of terrorism. I understand that I will have no coverage for losses resulting from certified acts of terrorism.

Named Insured &Salina Public EntitiesMailing Address:300 West Ash StreetSalina, KS 67401

First Named Insured/Producer Signature

Date

Print Name

### FORMER SCHILLING AIR FORCE BASE SITE ENVIRONMENTAL PROJECT MANAGEMENT AGREEMENT (pursuant to K.S.A. 12-2908)

among

## KANSAS STATE UNIVERSITY; UNIFIED SCHOOL DISTRICT NO. 305, SALINE COUNTY, STATE OF KANSAS; CITY OF SALINA, KANSAS; and SALINA AIRPORT AUTHORITY

for

## Financing, Administering, and Completing the Response Action According to a KDHE Consent and Final Order Relating to the Former Schilling Air Force Base Site

This Former Schilling Air Force Base Site Environmental Project Management Agreement ("Agreement") dated \_\_\_\_\_\_, 2020, is entered into among Kansas State University, an institution of higher education and an agency of the state of Kansas ("KSU"), which engages in higher educational activities at its Salina, Kansas campus ("Kansas State Polytechnic"); Unified School District No. 305, Saline County, State of Kansas, ("District"); the City of Salina, Kansas, a Kansas municipal corporation, ("City"); and the Salina Airport Authority, an authority established pursuant to K.S.A. 27-317, *et seq.*, ("Authority"); collectively referred to as the "Salina Public Entities" or "SPEs."

#### **Recitals**

A. In 2010, following years of negotiations with the United States Army Corps of Engineers, the SPEs filed suit (the "Law Suit") against the United States of America ("United States") in the United States District Court, District of Kansas (the "Court"), under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") alleging that the United States is liable to the SPEs for past and future response costs incurred or to be incurred by the SPEs regarding environmental contamination located at, on, or from the Schilling Air Force Base Site (the "Site").

B. In 2012, The SPEs and the United States entered into an initial Consent Decree ("2012 Consent Decree") in the Law Suit under which the State of Kansas, represented by the Kansas Department of Health and Environment ("KDHE") as the regulatory oversight agency, issued a Consent Agreement and Final Order ("CAFO") ordering the SPEs to complete a Remedial Investigation and Feasibility Study ("RI/FS") necessary for development of a Corrective Action Decision ("CAD") to be issued by KDHE selecting the remedy to be implemented in order to address environmental contamination at the Site.

C. The SPEs entered an Interlocal Cooperation Agreement dated December 20, 2012 for the purpose of administering completion of the RI/FS–CAD phase of the Site cleanup, which has been completed in compliance with the 2012 Consent Decree and the CAFO.

D. Following completion of the RI/FS–CAD work, the SPEs resumed mediation with the United States, which led to negotiation of the 2020 Consent Decree as approved by the SPEs on June 24, 2020, subject to formal approval by the United States and, ultimately, the Court (the "2020 Consent Decree").

E. Upon the Court's approval of the 2020 Consent Decree (1) the SPEs will be responsible for performing the Response Action in the CAD in exchange for payment by the United States on behalf of the settling federal agencies and (2) the State of Kansas, represented by the Kansas Department of Health and Environment ("KDHE") as the regulatory oversight agency, will issue either a new or amended CAFO ordering the SPEs to complete a scope of work that will implement the CAD.

F. The SPEs desire through this Agreement to provide for (1) termination of the current Interlocal Cooperation Agreement among the SPEs dated December 20, 2012 and (2) the financial and administrative structure necessary to enable the SPEs to collectively complete the environmental response actions at the Site in compliance with the 2020 Consent Decree and the CAFO.

**THE PARTIES**, therefore, agree and covenant:

1. <u>Acronyms and Definitions</u>. Whenever acronyms or terms listed below are used in this Agreement, the following definitions shall apply.

**"2020 Consent Decree"** shall mean the consent decree that the parties anticipate will be entered by the Court in *City of Salina, Kansas, et al., v. United States of America, et al.,* United States District Court for the District of Kansas at Kansas City, Case No. 10-CV-02298-CM/DJW. The effective date of the 2020 Consent Decree shall be the date upon which its approval by the Court is recorded on the Court's docket. A copy of the draft 2020 Consent Decree is attached and incorporated as <u>Exhibit 1</u> to this Agreement. A copy of the 2020 Consent Decree as approved by the Court shall be substituted as <u>Exhibit 1</u> to this Agreement following its recording on the Court's docket.

"Activities" shall have the meaning as ultimately defined by the CAFO. Pending the incorporation by reference of the ultimate definition of the term under the CAFO, "Activities" shall mean all work and obligations the SPEs are required to fund or perform to complete the Scope of Work necessary to implement the CAD at the Site under the terms of the CAFO.

"CAD" shall mean the final decision of KDHE selecting the final remedy to be implemented at the Site, issued on July 29, 2019, including any future changes or amendments to the CAD.

"CAFO" shall mean either the Consent Agreement and Final Order among KDHE and the SPEs dated November 15, 2012, including any future changes or amendments, or a new Consent Agreement and Final Order among KDHE and the SPEs for implementation of the CAD.

**"Estimated Activity Costs"** shall mean the SPEs' reasonable estimate of costs to complete the Activities as set forth in the Cost Estimate Summary attached and incorporated as <u>Exhibit 2</u> to this Agreement.

**"Executive Group"** shall mean the respective chief executive officers of each of the SPEs, including:

- (1) The CEO and Dean of K-State Polytechnic on behalf of KSU;
- (2) The Superintendent on behalf of the District;
- (3) The City Manager on behalf of the City; and
- (4) The Executive Director on behalf of the Authority.

**"Fund**" shall mean the separately-budgeted special revenue fund to be established by City ordinance and titled "Former SAFB Environmental Project Fund" in anticipation of receipt and authorized expenditure of the United States Settlement Payment and the Retained Federal Funds on behalf of the SPEs.

**"KDHE"** shall mean the Kansas Department of Health and Environment and any successor departments or agencies of the State.

"Oversight Costs" shall mean all oversight expenditures, direct and administrative, incurred by or on behalf of KDHE to conduct or support the SPEs' performance of the Response Action at the Site under the terms of the CAFO. The term "direct costs" shall include, but is not limited to, employee or contractor time related to oversight, sampling, investigation work, remedial work, document review and preparation, negotiation and preparation of enforcement documents and actions, internal and external discussions, travel expenses, and public involvement activities; equipment used; and other costs directly associated with, or incurred at or in relation to, the Site. The term "administrative costs" shall include, but is not limited to, overhead costs and general administrative costs. (CAFO, ¶54.a.).

**"Project Engineer"** shall mean the lead environmental engineer employed by the SPEs' environmental engineering and consulting firm.

**"Project Management Cost"** shall mean a cost associated with project management functions, including, but not limited to, project administration costs, legal fees, public involvement tasks, and environmental insurance coverage.

**"Project Manager"** shall mean the staff member of one of the SPEs designated by the Executive Group to coordinate project design, bidding, and field work with the Project

Engineer and to schedule and coordinate all Executive Group meetings in consultation with the Project Engineer.

**"Remedial Action" or "RA"** shall mean the implementation component of the Response Action.

**"Remedial Design" or "RD"** shall mean the design component of the Response Action. The Remedial Design, Phase 1 is attached and incorporated as <u>Exhibit 3</u> which includes the remediation framework based on current knowledge of the Site. Future refinement of the design will be presented to KDHE for review in future numbered phases.

**"Response Action"** shall mean the environmental response actions for any covered substance at, on, or from the Site, as required by the CAD and/or by any other federal, state, or local law, as well as all related activities necessary to complete the response actions to achieve remediation goals to protect human health and the environment (including any future requirements arising under federal, state, or local law).

**"Response Costs"** shall mean all costs, including but not limited to direct and indirect costs, incurred or to be incurred by the SPEs related to the Response Action, including but not limited to the cleanup of, response to, or the corrective action or closure at, on, or from the Site, including costs to comply with or implement any past or future federal, state, or local environmental requirement, whether voluntary or compelled, or to otherwise address environmental conditions at or related to the Site. This includes any and all costs incurred by the SPEs pursuant to CERCLA, RCRA, or other federal law, state law, or common law related to the Site. Response Costs also include accrued interest on all such costs and including all payments to, or costs of, federal, state, local, or other governmental authorities. Response Costs include all costs for actions by the SPEs to comply with specific or general environmental requirements and facility maintenance, development, repair, modification, compliance, or operational activities that are in any way related to environmental cleanup, at, on, or from the Site, in the past or in the future.

**"Retained Federal Funds"** shall mean the remaining unused federal funds component of the former SAFB RI/FS Fund in the amount of \$1,799,399 as of May 31, 2020 as authorized for retention by the SPEs under the Consent Decree.

"Salina Public Entities" or "SPEs" (also "Plaintiffs" in the 2020 Consent Decree and "Respondents" in the CAFO) shall mean Kansas State University, an institution of higher education and an agency of the state of Kansas ("KSU"), which engages in higher educational activities at its Salina, Kansas campus ("Kansas State Polytechnic"); Unified School District No. 305, Saline County, State of Kansas, ("District"); the City of Salina, Kansas, a Kansas municipal corporation, ("City"); and the Salina Airport Authority, an authority established pursuant to K.S.A. 27-317, *et seq.*, ("Authority").

"Scope of Work" shall mean the SPEs' (or Respondents') Scope of Work as ultimately prepared by the SPEs, reviewed and approved by KDHE, and incorporated into the CAFO.

**"Site"** shall mean the former Schilling Air Force Base and surrounding area, located near Salina, Kansas in Saline County, Kansas, as generally depicted on the map included in the Remedial Design, Phase 1 (See <u>Exhibit 3</u>).

"State" shall mean the State of Kansas, including but not limited to KDHE.

"United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including but not limited to EPA, the United States Army Corps of Engineers (Corps) and the United States Department of Defense and its Secretary of Defense (DOD), and their successor departments, agencies, and instrumentalities.

**"United States Settlement Payment"** shall mean the sum of \$65,900.000 to be paid by the United States to the SPEs pursuant to the Consent Decree.

## 2. <u>Termination of Current Interlocal Agreement; Preconditions to</u> <u>Commencement and Duration</u>.

2.1. <u>Termination of Current Interlocal Agreement</u>. The Interlocal Cooperation Agreement dated December 20, 2012 entered among the SPEs pursuant to the Kansas interlocal cooperation act is terminated as of commencement of this Agreement.

2.2. <u>Preconditions; Commencement</u>. The obligations of the SPEs under this Agreement shall be preconditioned upon and shall commence effective upon both:

- (1) Execution and entry of an order of the United States District Court approving the 2020 Consent Decree; and
- (2) The SPEs' receipt of payment from the United States as provided in the 2020 Consent Decree.
- 2.3. <u>Duration</u>. This Agreement shall remain in effect until:
  - (1) The SPEs have received written notification from KDHE that the Activities have been performed and completed in accordance with the CAFO; and
  - (2) All matters set forth in ¶¶ 5.10 and 5.11 below have been completed in compliance with the Consent Decree and the CAFO.

3. <u>No Separate Entity – Executive Group</u>. The purpose of this Agreement can be most effectively fulfilled without the creation of any separate legal or administrative entity. The SPEs authorize their respective chief executive officers, or their designees, to serve as the Executive Group as more fully described in ¶6.2 below.

4. <u>Purpose</u>. The purpose of this Agreement is to provide for the administrative structure necessary to enable the SPEs to collectively complete the Activities at the Site in compliance with the 2020 Consent Decree and the CAFO.

# 5. <u>Funding the Activities</u>.

5.1. <u>Estimated Activity Costs</u>. The Estimated Project Costs (including contingency) for performance of the Activities by the SPEs is \$71,700,000.00 (See <u>Exhibit 2</u>). The Investment and Project Cash Flow Summary over the course of performance of the Activities is attached and incorporated as <u>Exhibit 4</u>.

5.2 <u>Fund</u>. The City shall establish by ordinance a separately budgeted special revenue Fund to be titled "Former SAFB Environmental Project Fund." The Fund shall be entirely segregated from all other City funds. The transfer of any funds from the Fund to any other account of the City shall be prohibited during the term of the CAFO, except by check drawn on the Fund in accordance with \$5.8 in payment for (a) Activities performed by City employees as authorized pursuant to \$6.4 or (b) a Project Management Cost as authorized pursuant to \$6.5.

# 5.3. <u>Transfers to the Fund</u>. Transfers to the Fund shall include:

- (1) United States Settlement Payment \$65,900,000; and
- (2) Retained Federal Funds \$1,799,399 (plus accrued interest).

The City's director of finance and administration shall provide the United States with electronic funds transfer instructions necessary for deposit of the United States Settlement Payment into the Fund. The United States Settlement Payment shall be deposited in the Fund upon receipt by the City and the Retained Funds shall be transferred to the Fund upon establishment of the Fund. The Fund shall be invested and expended in accordance with this Agreement over the course of completion of the Activities.

5.4. <u>SPEs Additional Funding</u>. Based upon the Cost Estimate Summary (see <u>Exhibit 2</u>) and the Investment and Project Cash Flow Summary (see <u>Exhibit 4</u>), additional funding by the SPEs is not projected to be required at this time. If circumstances change such that unexpected and/or additional costs consistent with the Scope of Work are identified and local funds are required to complete the Scope of Work, the SPEs agree to negotiate the allocation of such costs if and when the need arises.

5.5. <u>Demand for Interest</u>. The 2020 Consent Decree provides for the payment of interest on the United States Settlement Payment if it has not been made by the United States within 90 days of the effective date of the 2020 Consent Decree and the SPEs have timely given payment instructions. If payment has not been received by the SPEs within 90 days after the effective date of the Consent Decree, the Executive Group shall make demand upon the United States for payment of interest in accordance with the 2020 Consent Decree.

5.6. <u>Accounting and Reporting</u>. The City shall account and report on all financial activity relating to the Fund in compliance with generally accepted accounting principles

established by the governmental accounting standards board. The City shall separately account monthly to the Executive Group for all Fund financial activity. The SPEs acknowledge that accounting records for the Fund are public records for purposes of the Kansas Open Records Act.

5.7. <u>Fund Investment</u>. The Fund shall be invested in the manner determined by the Executive Group in compliance with applicable Kansas law regarding the investment of public funds. Any earnings resulting from investment of the Fund shall be credited to the Fund.

5.8. <u>Disbursement of Funds</u>. Any disbursement from the Fund shall be made only by check drawn on the Fund upon presentation of an invoice to the City's chief financial officer with written pre-approval for payment by the chief financial officer of the Authority, and shall be limited to:

- (1) Payments due for work properly performed pursuant to a duly authorized contract and conducted subject to and consistent with the Scope of Work;
- (2) KDHE Oversight Costs qualified for reimbursement pursuant to the CAFO;
- (3) A qualified Project Management Cost;
- (4) Reimbursement of SPEs expenditures for environmental counsel and environmental engineering work completed from January 15, 2020 to the effective date of the 2020 Consent Decree; and
- (5) Payment of environmental, third-party liability insurance policy premiums.

5.9. <u>Audit</u>. The Fund shall be annually audited as a component of the City's annual independent financial audit. The SPEs agree that the incremental cost of auditing the Fund over and above the cost of the City's normal audit shall be separately invoiced and paid from the Fund as a Project Management Cost.

5.10. <u>Compliance Process Upon Completion of the Activities</u>. Upon completion of the Activities, the Executive Group shall direct the following:

- (1) Submit to the State a written certification that the Activities have been completed in full satisfaction of the requirements of the CAFO within 90 days after the SPEs conclude that the Activities have been completed; and
- (2) Pursue certification by KDHE that the Activities have been performed in accordance with the CAFO and completed. If the SPEs are notified by KDHE of Activities that have not been completed in full satisfaction of the CAFO, the Executive Group may (a) direct the performance of those activities to the extent such activities are consistent with the CAFO; (b) invoke the dispute resolution procedures set forth in the CAFO; or (c) initiate any other responsive action deemed advisable under the circumstances. Any direct costs incurred in pursuing dispute resolution under the CAFO, including attorney fees and expert fees, shall be shared equally among the SPEs.

5.11. <u>Close-out of the Fund</u>. Following (1) completion of the processes outlined in ¶5.10 and (2) final accounting and audit of all expenditures from the Fund; any cash balance remaining in the Fund shall be disbursed to the SPEs in equal shares, whereupon the Fund shall be terminated.

# 6. <u>Administration of the Activities</u>.

6.1. <u>Performance of the Activities</u>. The Activities to be performed by the SPEs pursuant to the CAFO shall be conducted subject to and consistent with:

- (1) The approval of KDHE in accordance with the terms of the CAFO and within the Scope of Work; and
- (2) The standards, specifications and schedules approved by KDHE as contained in the exhibits to the Remedial Design.

Upon KDHE approval, the SPEs will be responsible for implementing the tasks to be detailed in KDHE-approved Scope of Work, specifications, and related documents.

6.2. <u>Oversight by Executive Group</u>. In order to enable the SPEs to collectively administer execution of their collective responsibility for completion of the Activities, the SPEs delegate to the Executive Group the administrative oversight responsibility and authority normally associated with their own executive support staff functions. The Executive Group shall meet and confer as needed and shall serve (1) in the roles described in this Agreement, and (2) as authorized representatives of the SPEs in relation to the collective obligations of the "Plaintiffs" under the Consent Decree and the "Respondents" under the CAFO.

6.3. <u>Contracts for General Environmental Engineer and Consultant; Specialized</u> <u>Services</u>. The SPEs agree that the Activities can best be accomplished through contracts for services between the City, as the SPEs' designated contracting party, and:

- (1) A general consultant selected by the Executive Group in the manner outlined in  $\P6.3.1$ . ("General Environmental Engineer and Consultant"); and
- (2) Specialized contractors to be selected by the Executive Group in the manner outlined in ¶6.3.2. (the "Specialized Contractors") to perform categories of specialized tasks identified by the Executive Group, all under the oversight and coordination of the General Environmental Engineer and Consultant (but not as subcontractors of the General Environmental Engineer and Consultant).

In order to complete the Activities, the City shall, by public action of its governing body and subject to the requirements of  $\P6.1$  above, enter into contracts with and compensate from the Fund the General Consultant and Specialized Contractors to be selected in the following manner:

6.3.1. General Environmental Engineer and Consultant Selection. The SPEs agree that the interests of their respective constituencies are best served by continuing to engage the Dragun Corporation, Farmington Hills, Michigan, ("Dragun") as the General Consultant for completion of the Activities. Dragun was selected in 2005 as the SPEs' technical consultant in relation to the Site from among a number of highly qualified candidates through a competitive, qualifications and interview-based selection process. Dragun played an integral role in the development of the Remedial Design, Phase 1; Scope of Work and related Cost Estimate Summary (see Exhibit 2). Dragun has extensively studied all environmental and hydro-geological aspects of the Site in the course of its work relating to the Site and is uniquely qualified to serve as the General Environmental Engineer and Consultant. For those reasons, the SPEs desire to engage Dragun as their General Environmental Engineer and Consultant. The City, in consultation with the Executive Group, agrees to make a good faith effort to negotiate a contract with Dragun for its services as General Environmental Engineer and Consultant in the completion of the Activities. If the City's negotiations with Dragun are unsuccessful or if a contract between the City and Dragun for Dragun's services as General Environmental Engineer and Consultant is terminated for any reason, the Executive Group shall conduct a qualifications-based selection process to identify a recommended alternative General Environmental Engineer and Consultant. The City, in consultation with the Executive Group, agrees to enter into good faith negotiations toward entering into a contract with the alternative General Environmental Engineer and Consultant recommended by the Executive Group for its services in the completion of the Activities.

6.3.2. <u>Specialized Contractor Selection</u>. The Executive Group shall direct the processes it determines necessary in order to:

- (1) Identify, after consideration of the recommendation of the General Environmental Engineer and Consultant, the categories of specialized work and the scope of work to be performed by Specialized Contractors in accordance with ¶6.1;
- (2) Pre-qualify a reasonable field of specialized contractors for each category of specialized work; and
- (3) Conduct a qualifications-based selection process to identify recommended contractors for each category of specialized work.

The City, in consultation with the Executive Group, agrees to make a good faith effort to negotiate a contract with each of the specialized contractors recommended by the Executive Group. If the City's negotiations with a particular specialized contractor are unsuccessful or if a contract between the City and a particular specialized contractor is terminated for any reason, the Executive Group shall conduct a qualifications-based selection process to identify a recommended alternative specialized contractor for the applicable category of specialized work. The City, in consultation with the Executive Group, agrees to make a good faith effort to negotiate a contract with the alternative specialized contractor recommended by the Executive Group.

6.4. <u>Potential Work Performed by SPE Personnel</u>. The Executive Group may from time-to-time identify specific components of the Activities that can be most readily be performed by employees of one or more of the SPEs. In those cases, the Executive Group shall provide the chief executive officer of any SPE with employees involved in a component of the Activities with a written scope of the work to be performed and authorization to direct the performance of the work. If the applicable SPE is to be compensated for the work performed by its employees, it shall, subject to the requirements of ¶6.1 above, enter into a contract with the City for completion of the work for compensation to be approved by the Executive Group and paid in accordance with ¶5.8. If the work is to be performed by employees of the City, the contract for completion of the work shall be entered into between the City and the Authority.

6.5. <u>SPEs' Project Management</u>. The Estimated Activity Costs as set forth in the Cost Estimate Summary (see Exhibit 2) include a line item component for administration expenses. The Executive Group shall be responsible for managing the utilization of those budgeted funds on behalf of the SPEs, subject to the requirements of  $\P6.1$  above. The Executive Group shall by separate memorandum identify:

- (1) Those project management functions to be compensated and related expenses to be reimbursed as a qualified Project Management Cost;
- (2) The method of cost accounting for Project Management Costs; and
- (3) The form of documentation required for payment pursuant to ¶5.8 above to any of the SPEs for Project Management Costs.

6.6. <u>Reimbursement for Certain Fees and Expenses</u>. The SPEs shall be reimbursed from the Fund in the manner described in ¶5.8 above for expenditures for environmental legal counsel and environmental engineering fees and expenses for work completed from January 15, 2020 to the effective date of the 2020 Consent Decree as a qualified Project Management Cost.

6.7. <u>Environmental Insurance</u>. The SPEs agree to procure, following the effective date of the Consent Decree, environmental, third-party liability insurance coverage as described in the Lockton Companies' Environmental Insurance Report attached and incorporated as <u>Exhibit 5</u>, the premium for which shall be deemed a qualified Project Management Cost to be paid in the manner described in ¶5.8 above.

6.8. <u>Project Management Structure</u>. The Executive Group shall represent the SPEs for purposes of all collective administrative and oversight functions required in order to complete the Activities. Under the terms of its contract with the City, the General Environmental Engineer and Consultant will be responsible for completion of the Activities in accordance with ¶6.1 above. The General Consultant will be assisted in the performance of the Activities by (a) certain subcontractors to be selected and directly subcontracted by the General Environmental Engineer and Consultant and (b) the Specialized Contractors. The work of the General Environmental Engineer and Consultant's staff, its subcontractors, and the Specialized Contractors will all be under the oversight and coordination of the General Environmental Engineer and Consultant. The

General Environmental Engineer and Consultant will designate a Project Engineer who will represent and be the contact person for communications between the Executive Group and the General Environmental Engineer and Consultant. The General Environmental Engineer and Consultant will also maintain a resident field manager to coordinate on-Site execution of the Activities.

7. <u>Termination, Amendment, or Withdrawal from Agreement</u>. This Agreement shall not be terminated prior to the fulfillment of its duration pursuant to Section 2 above. This Agreement may be amended by the unanimous written consent of all the SPEs. An SPE may be allowed to withdraw as a party to this Agreement upon the unanimous written consent of the remaining SPEs.

8. <u>Manner of Acquiring, Holding, and Disposing of Property</u>. The SPEs do not anticipate the separate acquisition, holding or disposition of property under this Agreement. Ownership of any personal property acquired pursuant to this Agreement shall be designated among the SPEs by the Executive Group at the time of purchase of the personal property. Any capital improvements or the installation of equipment that would be regarded as a part of the real estate owned by an SPE Entity shall be regarded as the property of that SPE. Any monitoring systems or other installations relating to the monitoring, remediation, or mitigation of environmental contaminants will be regarded as part of the City's water and sewer utility system.

# 9. <u>General Provisions</u>.

9.1 <u>Non-appropriation</u>. The SPEs acknowledge that the City is subject to Kansas budget and cash basis laws, and that payment of the obligations of the City can only be paid from appropriated funds legally available for such purpose. Nothing in this Agreement shall be interpreted or construed as a commitment or requirement that the City, on behalf of the SPEs, obligate or pay funds in contravention of applicable Kansas law.

9.2. <u>Entire agreement</u>. This Agreement constitutes the entire agreement among the SPEs and supersedes all prior agreements and understandings pertaining thereto, whether written or oral. No covenant, representation or condition not expressed in this Agreement shall affect or be deemed to interpret, change or restrict the express provisions of this Agreement.

9.3. <u>Feminine-Masculine</u>, <u>Singular-Plural</u>. Wherever used, singular shall include the plural, plural the singular, and use of any gender shall include all genders.

9.4. <u>Kansas Law – Interpretation</u>. This Agreement and its validity, construction and performance shall be governed by the laws of Kansas. This Agreement shall be interpreted according to its fair meaning, and not in favor of or against any party.

9.5. <u>Notices</u>. All notices and demands shall be given in writing either by personal service or by registered or certified mail, postage prepaid, and return receipt requested. Notices shall be addressed as appears below for each party:

K-State Polytechnic:	Alysia Starkey CEO and Dean 2310 Centennial Road College Center 202C Salina, KS 67401-8196
USD 305:	Linn Exline Superintendent 1511 Gypsum Salina, KS 67401
City of Salina, Kansas:	Shandi Wicks City Clerk P.O. Box 736 Salina, KS 67402-0736
Salina Airport Authority:	Timothy F. Rogers Executive Director 3237 Arnold Ave. Salina, KS 67401

9.6. <u>Invalidity in part</u>. In the event that any condition, covenant or other provision herein contained is held to be invalid or void by any court of competent jurisdiction, the same shall be deemed severable from the remainder of this Agreement and shall in no way affect any other condition, covenant or provision herein contained. In the event a provision is deemed invalid, the SPEs agree to amend this Agreement to include a new condition, covenant, or other provision that replicates as closely as is legally possible under Kansas law the intent of the severed provision.

9.7. <u>Authorized signatories</u>. Each signatory executing this Agreement does thereby represent and warrant to the other parties that the signatory has been duly authorized to deliver this Agreement in the capacity and for the entity for which the signatory acts.

9.8. <u>Headings</u>. The headings of the sections of this Agreement are included for the purposes of convenience only and shall not affect the interpretation of any provision hereof.

9.9. <u>Applicable Law; Venue</u>. This Agreement and its validity, construction and performance shall be governed by the laws of Kansas. In the event of any legal action to enforce or interpret this Agreement, the sole and exclusive venue shall be in the Saline County, Kansas District Court.

9.10. <u>Time</u>. Time is of the essence of this Agreement.

9.11. <u>Parties Bound</u>. This Agreement shall extend to and bind the parties and their successors or other entities or persons otherwise bound by law.

9.12. <u>Counterparts</u>. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, or in multiple originals, and all such counterparts or originals shall for all purposes constitute one agreement. To ensure that each of the SPEs signs an identical document and that there is a meeting of the minds, the final Agreement shall be emailed to the SPEs and their representatives attached as a read-only PDF in one group email ready for execution. Any document bearing language different from the emailed attachment will not be considered an original or counterpart.

9.13. <u>Waiver</u>. No failure or delay by a party hereto to insist on the strict performance of any term of this Agreement, or to exercise any right or remedy consequent to a breach thereof, shall constitute a waiver of any breach or any subsequent breach of such term. No waiver of any breach hereunder shall affect or alter the remaining terms of this Agreement, but each and every term of this Agreement shall continue in full force and effect with respect to any other then existing or subsequent breach thereof.

9.14. <u>No Third-Party Beneficiaries</u>. Solely the parties to this Agreement shall have rights and may make claims under this Agreement. There are no intended third-party beneficiaries under this Agreement, and no third parties shall have any rights or make any claims hereunder.

9.15. <u>Authority and Consent to Transaction</u>. Each SPE represents to the other SPEs that the person executing this Agreement has full and legal authority to bind such SPE to the terms of this Agreement, and that the execution and delivery of this Agreement have been duly and validly authorized by the governing body of each SPE.

**IN WITNESS WHEREOF**, each of the parties hereto, by its duly authorized representative, has executed this Agreement on the date shown below the representative's signature, with this Agreement to be in effect as of the latest date of signature below.

(Signature page follows)

## KANSAS STATE UNIVERSITY

Richard Myers, President
Date:

# CITY OF SALINA, KANSAS

Michael L. Hoppock, Mayor Date:

Attest:

Shandi Wicks, CMC, City Clerk

# SALINA AIRPORT AUTHORITY

Alan Eichelberger, Chairman Date:

Attest:

Troy Vancil, Secretary

## **UNIFIED SCHOOL DISTRICT 305**

Ann Zimmerman, Board President Date:

Attest:

Deborah Howard, Board Clerk