

Nammo Defense Systems Inc.
4051 North Higley Road • Mesa, Arizona 85215

COMMUNITY RELATIONS PLAN



Administrative Order on Consent RCRA 3008(h)-09-2021-001

Nammo Defense Systems Inc., 4051 North Higley Road, Mesa, Arizona

AZD981425010 [also AZD980816276, AZD020132502, AZD980885362, AZD982361347, AZD982471096]

Prepared:

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Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, Region 9

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1.0 EXECUTIVE SUMMARY

This Community Relations Plan (CRP) pertains to the community outreach and participation efforts pertaining to certain environmental remediation activities in and around the Nammo Defense Systems Inc. (NDS) manufacturing facility located at 4051 North Higley Road, Mesa, Arizona (the Site or NDS Site). The CRP is the Site-specific tool utilized to enable and promote transparency and community involvement associated with the remediation process from investigation through final remedy. The goal of this plan is to define outreach efforts performed by NDS that will be used to provide opportunities for the public to become engaged, create communication pathways, provide the community with information, address concerns, and provide notifications of the ongoing cleanup process. Assessing community concerns and seeking public input are critical components in NDS’s environmental remediation decision-making process. This CRP is a “living document” and will be updated as appropriate.

2.0 INTRODUCTION

This document outlines the community outreach plan to be used by NDS while conducting investigation and cleanup activities at two Areas of Concern (AOCs) associated with historic operations conducted by a former entity at the Site. These AOCs are being investigated and remediated under the guidance of The United States Environmental Protection Agency (EPA) under an Administrative Order on Consent (Order on Consent) and with the Arizona Department of Environmental Quality (ADEQ) under their Voluntary Remediation Program (VRP).

3.0 PURPOSE OF THE COMMUNITY RELATIONS PLAN (CRP)

The purpose of this CRP is to inform Stakeholders of the ongoing environmental remediation at Nammo Defense Systems Inc. (NDS) in Mesa, Arizona, and encourage two-way communication and feedback with community members to participate in the process. This CRP outlines NDS’s environmental public participation and community involvement goals in partnership with community Stakeholders, the Salt River Pima – Maricopa Indian Community (SRPMIC), EPA, and ADEQ.

To further reinforce two-way communications and accomplish the purpose of this CRP, NDS created a publicly accessible website, www.nds-site-remediation.com which is an essential and required element of the CRP and should also be considered a key companion element to this plan. The website is compatible with

common hardware platforms (e.g., desktop and mobile users) and only requires that users have access to a web browser and an internet connection to access the NDS Site remediation online digital document repository. This repository contains descriptions of the Site history, information regarding Contaminants of Concern (COCs) and potential concern, impacted media, regulatory coordination and oversight, the EPA's Administrative Order on Consent (Order on Consent) document dated February 9, 2021, completed and ongoing remedial actions, and future Site work. Figures and website content are updated as Site conditions change, and as documents are finalized.

A "Keep Me Informed" selection is included on the website as an option for interested parties and Stakeholders to sign up for the site emailing/ mailing list.

4.0 SITE BACKGROUND

4.1 Site Location

The NDS site is located at 4051 North Higley Road, Mesa, Arizona (the Site or NDS Site), approximately 20 miles east-northeast of downtown Phoenix. The Site is comprised of 534 acres located in the Sonoran Desert in the northeast portion Mesa, Maricopa County, Arizona, on land leased from the Arizona State Land Department (ASLD). The NDS Site consists of four Plants, which are separate manufacturing sub-sites located within the confines of the Site (Plant 1 through Plant 4) as well as an open-air Desert Firing Range (DFR). The Site is bordered to the north and northwest by the Salt River Project (SRP) Southern Canal, the Salt River, the Washington National Primate Research Facility, and the SRPMIC. The Red Mountain Ranch residential community borders the Site to the east. Loop 202 (Red Mountain Freeway) and residential properties currently under construction are located to the south of the Site.

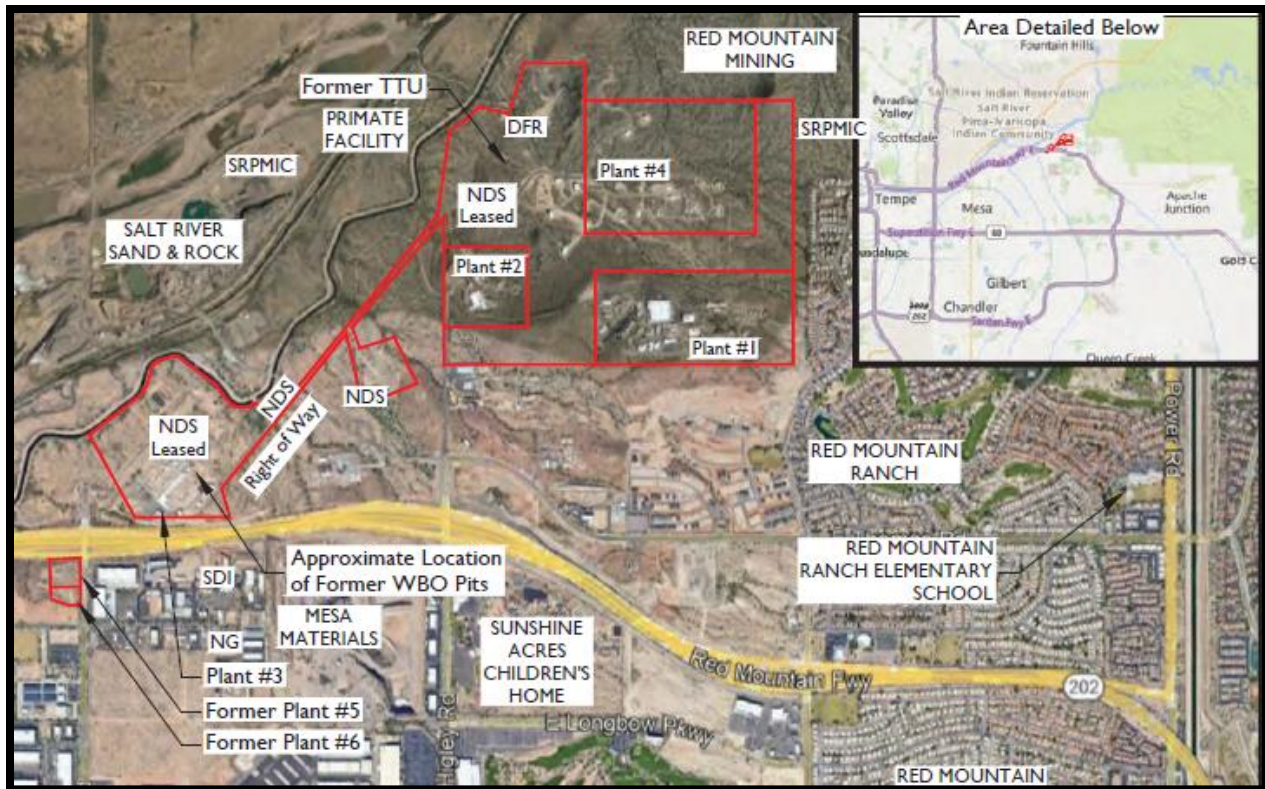


Figure 1 – Site Vicinity Map (Extracted from 2023 Q1 Groundwater Report)

4.2 Site History

Historically, Talley Industries Inc. (Talley) operated at the Site from 1960 until the mid-1980's. Talley specialized in the design, development and manufacture of ammunition and energetic material solutions for defense and commercial applications, including aircrew escape systems, automobile airbag components, submunition dispensing systems, and shoulder-fired weapons. In 1984, Talley Industries Inc. was reorganized as Talley Defense Systems Inc. (TDS) and continued operations until 2007.

TDS was acquired in 2007 and became part of the Nammo group of companies. It presently operates under its current ownership as Nammo Defense Systems Inc. NDS conducts manufacturing, testing, and research and development for energetic material solutions on the Site.

4.3 Summary of Environmental History and Investigation

The environmental regulatory history of the facility includes two main historical release areas: the former Thermal Treatment Unit (TTU), previously located adjacent to the current DFR; and the former Water Bore Out (WBO) located at Plant

3. Currently, certain environmental remediation actions occurring at the Site are administered under an Order on Consent (Docket No. RCRA 3008(h)-09-2021-001) entered into by and between the EPA and NDS. Investigation of perchlorate at the former WBO and volatile organic compounds (VOCs) from Plant 3 is currently being addressed pursuant to the ADEQ VRP.

4.3.1 Former Thermal Treatment Unit (TTU)

The former TTU began operating in approximately 1966 under former Site occupants and was never operated by NDS. The former TTU is located northwest of Plants 2 and 4 and east of both the Salt River and the SRP Southern Canal. At this location, waste propellants were treated for disposal by burning, which was considered one of the best and safest methods of treatment for these materials at the time. Disposal activities by TDS were conducted under an approved ADEQ Open Burning Permit for Hazardous Materials and pursuant to the Resource Conservation and Recovery Act (RCRA) Part B permit application procedures for collecting and burning waste propellants. Historically, TDS would collect waste propellant from authorized production or storage locations from within the Site and transport the material to the former TTU. Upon arrival, TDS personnel unloaded and sorted the waste based on propellant type, which was then moved to a designated treatment area or apparatus within the TTU. Once in place, the hazardous waste was ignited remotely. After disposal, TDS personnel proceeded to wet down the TTU area and confirmed all fires were extinguished and the TTU area was cold.



Figure 2 (Photo) – Former TTU Area (current condition)

Contaminants of Concern (COCs) in this area include lead, perchlorate, VOCs, and 1,4-dioxane. Impacted media include soil, bedrock, and groundwater. NDS monitors the current groundwater impact via a network of monitoring, extraction, and injection wells. An impacted groundwater plume currently measures approximately 0.25 miles long and extends off-Site to the west, within SRPMIC land.

NDS has initiated and conducted multiple interim cleanup measures including source area soil removal, an in-situ biological injection pilot study, and the installation and operation of a groundwater pump and treat evaporation system. At present, a hydraulic containment system is operated in the vicinity of the former TTU to mitigate potential migration of COCs in groundwater. Impacted groundwater is collected in storage tanks at two containment wells and is processed through an evaporation system.

Quarterly groundwater monitoring reports detail the results of routine monitoring and sampling activities. These reports can be viewed in the Site Repository and Data section of NDS's publicly accessible website, www.nds-site-remediation.com.

4.3.2 Former Water Bore Out (WBO)

The former WBO area lies within the current NDS facility at Plant 3 and is located northeast of the intersection of Greenfield Road and the Loop 202 Red Mountain Freeway in Mesa, Arizona.

At the former WBO facility, the prior site operators removed propellant from rocket motors using high pressure water; this water was ultimately moved to one of two former earthen infiltration basins located at Plant 3 after use. Operation of the former WBO and discharge to the former WBO pits ceased in 1990 in response to a request from ADEQ.

Chlorinated solvent storage and hazardous waste accumulation areas have been historically documented at Plant 3. After VOCs impacts of unknown origin (primarily trichloroethene and 1,1-dichloroethene) were detected in groundwater immediately downgradient of Plant 3 and the presence of VOCs was investigated in that area. The results of the VOC investigation identified the presence of VOCs in shallow soil, and ultimately identified that these compounds impacted the area below the grade of the water table under Plant 3.



Figure 3 (Photo) – Former WBO Area (current condition)

COCs at WBO and Plant 3 are perchlorate and VOCs, primarily trichloroethene and 1,1-dichloroethene. Impacted media include soil and groundwater. The

contaminated groundwater plume extends approximately 2.75 miles off-site downgradient south of the former WBO source area. NDS monitors the current groundwater impact via a network of monitoring, irrigation, industrial, and extraction wells. Groundwater at the Site was formerly monitored under ADEQ's Aquifer Protection Plan prior to transitioning to the ADEQ VRP in May 2019.

NDS has initiated and conducted multiple interim cleanup measures including source area soil removal, a soil vapor extraction (SVE) system, and a groundwater pump and treat system at Plant 3. The pump and treat system utilizes Fluidized Bed Reactors (FBRs) for treatment of the extracted water at the former WBO. After treatment, the treated water is directed to on-Site infiltration basins, where the treated water percolates into the subsurface to be reabsorbed in the ground. Since system startup in January 2015, approximately 3,720 lbs. of perchlorate have been removed by the FBRs.



Figure 4 (Photo) – FBR Groundwater Treatment System

NDS continues to further identify, track and define the location of the groundwater plume. Groundwater monitoring reports detailing results of monitoring activities are currently issued semi-annually (historically quarterly) and may be viewed in the in the Site Repository and Data section of NDS's publicly accessible website, www.nds-site-remediation.com.

5.0 CRP REQUIREMENTS: ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) VOLUNTARY REMEDIATION PROGRAM (VRP)

As previously outlined in Section 4.3.2, groundwater at the Site was formerly monitored under ADEQ's Aquifer Protection Plan prior to transitioning to the ADEQ VRP in May 2019.

Under ADEQ's guidelines for VRP community involvement, requirements at NDS are listed below under the categories of: Field Work Notices, Remedial Action Work Plans, and No Further Action (NFA) Requests. ADEQ's VRP manager further clarified that when community involvement activities are required, specific instructions will be provided by the VRP manager at that time due to potential variables. Arizona Revised Statutes § 49-176 is the Arizona State Law governing community involvement requirements under the Arizona VRP.

5.1 VRP Field Work Notices

- Distribute flyers notifying potentially impacted parties and display signage at the work site;
- Include Site information and duration of work;
- Include NDS and/or consultant and ADEQ contact information; and
- Distribute two (2) weeks prior and have on-hand during field work.

5.2 VRP Remedial Action Work Plans

- 30-day public comment period;
- 45-day public comment period if institutional and/or engineering control will be used to achieve remediation levels;
- 45-day public comment period if site-specific remediation levels are proposed;
- NDS posts public notice in newspaper of general circulation to the Site;
- ADEQ posts public notice on ADEQ website; and
- NDS direct mail to local government agencies, surrounding communities, affected water providers.

5.3 VRP No Further Action (NFA) Request

- 30-day public comment period;
- 45-day public comment period for Conditional NFA (if an institutional and/or engineering control was used to achieve remediation levels);
- NDS posts public notice in newspaper of general circulation to the Site; and
- ADEQ posts public notice on ADEQ website.

6.0 CRP REQUIREMENTS: UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA) ADMINISTRATIVE ORDER ON CONSENT

On February 9, 2021, NDS and the EPA entered into an Order on Consent agreement. EPA Community Involvement Requirements are outlined in the Order on Consent, sections VIII.18.e, VIII.17.h and III.9.d requiring NDS to research and generate a Community Relations Plan. For purposes of ease of cross-referencing the CRP to the Order on Consent requirements, the citations in the Order on Consent and elements of this CRP are provide below. These requirements include:

- Development of Stakeholders (VIII.18.e(5)(a)) and (III.9.d);
- Assessment of Community Concerns (VIII.18.e(5)(b));
- Development of a Mailing List (VIII.18.e(5)(c));
- Conducting Public Meetings (VIII.18.e(5)(d)) and (VIII.17.h);
- Preparing Fact Sheets (VIII.18.e(5)(e));
- Conducting a Baseline Language Survey (VIII.18.e(5)(f));
- Maintaining a Physical Document Repository (VIII.18.e(5)(g));
- Maintaining an Electronic Document Repository and Website (VIII.18.e(5)(h)) and (VIII.17.h); and
- Inclusion of 2016 EPA Public Participation Manual Elements (VIII.18.e(5)(i)).

6.1 Stakeholders (VIII.18.e(5)(a)) and (III.9.d)

Stakeholders specifically designated by Section III.9.d of the EPA’s Order on Consent include ADEQ and SRPMIC. Stakeholders specifically designated in EPA’s correspondence dated August 11, 2023 include, but are not limited to: EPA, ADEQ, SRPMIC Environmental Protection & Natural Resources (EPNR), Salt River Project (SRP), and ASLD. All entities designated as Stakeholders in the Order on Consent and EPA correspondence dated August 11, 2023, are included in the Stakeholder List presented in **Appendix B**.

In addition to Stakeholders designated within the Order on Consent and EPA letter dated August 11, 2023, NDS has identified additional interested and affected Stakeholders including:

- **Directly Impacted Parties:** Owners of property where monitoring and/or sampling is conducted, SRP, Washington National Primate Research Center (WANPRC), City of Mesa, LafargeHolcim, Habeeb Ranch, Citrus Heights Ranch, Painted Mountain, Longbow, Alta Mesa, and Apache Wells Golf Courses;

- **Geographically Adjacent Parties:** NDS employees and all businesses, residents and landowners within a Community Involvement Area (CIA) currently defined by the EPA as bound by University Drive to the south, SRPMIC and BLM Land to the north, Power Road to the east and Val Vista Road to the west;
- **Appropriate Federal, State, County, and City government entities;** and
- **Interested Community Groups.**

All parties and areas listed above are included in the Stakeholder List, with general categories such as government entities and interested community groups being further researched and refined during the Community Interview process. The Stakeholder List will include Stakeholder name, applicable Stakeholder criteria (impacted party, geographic, etc.), and contact information where available.

6.2 Assessment of Community Concerns (VIII.18.e(5)(b))

Assessing community concerns and seeking public input are critical components in NDS's environmental remediation decision-making process. This CRP reflects NDS's environmental public participation and community involvement goals in partnership with the EPA, ADEQ, SRPMIC and Stakeholders.

NDS is using a layered approach to conduct the community concerns assessment, including tools identified in the *2016 RCRA Public Participation Manual's RCRA Public Participation Checklist, Community Engagement Assessment Worksheet for RCRA Permit Activities and Tools, Community Interviews.*

Additionally, community concerns will be assessed through ongoing interactions with Stakeholders and data review such as data found in the 2020 Census and in the Environmental Justice Screening and Mapping Tool (EJScreen) for the community. Community demographics can be found in the EJScreen, included in **Appendix C.**

Interview introductions include a statement that NDS considers the interviewee a Stakeholder, a description of NDS Site background information and figures, points of contact and website references for additional questions.

Additionally, it includes questions designed to identify specific concerns, a space to write in additional concerns, and questions to determine what languages other than English in non-English-speaking communities would be needed for translation purposes. Interviewees will be given the option to be added to the Site

mailing/emailing list for the ongoing distribution of Site information and updates, as well as the interviewees preference between mail and email for future communications.

Stakeholders will be contacted by a NDS Community Outreach representative to determine their interest in being interviewed. Interview data will be analyzed and incorporated into future CRP updates to evaluate community concerns, the need for translation services, and the level of interest the community holds for the Site.

6.3 Mailing List (VIII.18.e(5)(c))

Mailing lists/emailing lists under development include all known and key Stakeholders and interested parties, unless they decline to be included. These parties will be the same as those identified during NDS's assessment of community concerns for both the EPA and ADEQ environmental programs. Additionally, any individual or party that selected the option to be added to the mailing/emailing list for the ongoing distribution of Site information and updates during NDS's assessment of community concerns or by selecting the "Keep Me Informed" option on the www.nds-site-remediation.com website will be added.

The mailing list/emailing list will be housed in a database capable of sorting in fields by last name, mailing address, email address, title, organization, city, state, region, special interest, geographical area, and return-to-sender responses. As this mailing list/emailing list may contain Personal Identifiable Information (PII), the document will be submitted to both the EPA and ADEQ as controlled information under separate cover, so as to not be made public. The mailing/emailing list will be used to distribute Site notices, fact sheets, updates, and other relevant documents.

The mailing/emailing list will be updated annually. The goal of the annual update is to include new participants in the mailing/emailing list and remove those that produce return-to-sender responses and/or wish to be removed.

6.3.1 Contingency Plan for Mail Notifications If Necessary

In the event it is deemed necessary to contact all Stakeholders in the EPA's and/or ADEQ's defined CIAs, a contingency plan was developed to facilitate the distribution of postcards that include both a QR code and www.nds-site-remediation.com website address to sign up for the Site mailing list. Postcards will include a statement that NDS considers the recipient a Stakeholder, a brief description of the Site, a figure displaying the plume boundaries and major street names, a requested date by which the recipient is asked to sign up for the mailing/emailing list, and points of contact and website references for additional questions.

Other distribution methods may vary based on intended recipients to maximize efficient distribution to specific Stakeholders and/or the community. In the event the contingency plan is deemed necessary, consideration should be given to sending out postcards distributed by the United States Postal Service (USPS) Every Door Direct Mail (EDDM) service to Stakeholders within zip codes 85205, 85213, 85215, and 85256.

SRPMIC EPNR will determine whether postcards that include a write-in option to be added to the mailing list will be distributed to the SRPMIC community via hand delivery and retrieval.

6.4 Public Meetings (VIII.18.e(5)(d)) and (VIII.17.h.)

6.4.1 Meeting Format

NDS will conduct informal meetings at public venues to allow community members and interested parties to talk with Agency officials and NDS representatives on a one-on-one basis.

Meetings will have presentations given by NDS that will include a brief Site history, update on current Site activities and conditions (including any recent milestone documents) and planned future Site work. Following the presentation, attendees will be invited to speak with Agency Officials and NDS in an open house style format with stations providing maps, imagery, and tables with chairs. Input regarding specific concerns and future meeting topics will be solicited from attendees via both written options or web-based options using tablets after the presentation and one-on-one communication opportunities are finished. Translators will be provided at meetings should a baseline language study indicate the need to do so.

Should restrictions on in-person meetings be imposed as was done in the past due to Covid-19, NDS will host online meetings in the same manner as described for in-person meetings. NDS may utilize their on-site studios to host the online meetings. Hybrid meetings will also be considered.

6.4.2 Meeting Timing

Meetings will be held after the release of milestone documents. Should multiple milestone documents be released in quick succession, then multiple documents may be covered during a single meeting. An additional meeting may be conducted to present the public with project information and to solicit community input prior

to submitting a preferred remedy, per the guidance provided in the *2016 RCRA Public Participation Manual*.

Additional meetings will be held upon request by the EPA or ADEQ, or should significant interest be demonstrated by the public via responses to solicitation of community input. Meetings will be conducted on weekdays, after normal business hours, to encourage attendance by reducing attendee schedule conflicts. Consideration should also be given to adding a meeting option during daytime business hours for specific Stakeholders audiences.

6.4.3 Meeting Notifications

The public will be notified of upcoming meetings by contact through the emailing/ mailing list, posting on the NDS www.nds-site-remediation.com site webpage, notices posted by NDS on public boards at churches, public buildings, town halls, and by issuing news releases to newspapers, and online media organizations in a layered approach.

There will also be times where there will be specific requirements from EPA or ADEQ for NDS to post public notices such as display ads or legal notices in newspapers of general circulation to the Site. Meeting notifications will include the meeting date, time, location, and agenda. Notification materials will be created in languages additional to English should a baseline language study indicate the need to do so. NDS will pre-coordinate draft meeting notifications with EPA and ADEQ for approval prior to notifying the public of upcoming meetings.

Aside from informal public meetings, NDS will conduct additional public outreach and community involvement activities as requested by EPA and/or ADEQ. Any additional public outreach and community involvement meetings requested by EPA and/or ADEQ will be conducted in the same manner as described above, unless otherwise requested by EPA and/or ADEQ or Stakeholders.

6.4.4 Meeting Locations

Identified venues conducive to presentations and one-on-one discussion during public meetings include:

- Red Mountain Branch - Mesa Public Library, 635 N. Power Rd., Mesa, Arizona 85205;
- Fremont Junior High School, 1001 N. Power Rd., Mesa, Arizona 85205;
- Via Church, 740 N. Power Rd., Mesa, Arizona 85205; and

- SRPMIC Community Center and/or Roundhouse Cafe, 10047 E. Osborn Rd., Scottsdale, Arizona 85256.

6.5 Fact Sheets (VIII.18.e(5)(e))

NDS will draft fact sheets summarizing the findings and conclusions of each milestone document approved by EPA. All fact sheets will be provided to EPA for review within 30 days of EPA's approval of the associated milestone document.

Once approved, fact sheets will be disseminated to the public via the identified Stakeholders mailing list/electronically registered emailing list within 30 days of EPA's approval. Additionally, fact sheets will be made available to the public at appropriate public meetings and through NDS's digital and physical site document repositories. All fact sheets will be dated and sequentially numbered when published.

A RCRA Facility Investigation (RFI) Workplan fact sheet will explain the investigation's purpose and scope. After EPA approval, these fact sheets will be disseminated, housed, and published as described above following guidance provided in the *2016 RCRA Public Participation Manual*.

NDS has currently authored two fact sheets under the EPA's Order on Consent as of June 1, 2024. Fact Sheet 1 summarizes the NDS Site history and information about ongoing investigative and cleanup activities. It was posted to NDS's previous environmental website, www.ttuproject.info and is now posted to www.nds-site-remediation.com website. Fact Sheet 1 is also available to the public in the physical repository at the Red Mountain Branch - Mesa Public Library, 635 N. Power Road, Mesa, Arizona 85205. The library reference call number is 363.4284 AD65N 2021 V.1.

Fact Sheet 2 remains in draft form and is currently under review for approval by the EPA. Following EPA approval, fact sheets will be disseminated, housed, and published as described above.

6.6 Baseline Language Survey (VIII.18.e(5)(f))

An assessment of languages will be conducted for Stakeholders using Community Interview responses from the VIII.18.e(5)(b) Assessment of Community Concerns,

described above and data review such as data found in the 2020 Census and in the Environmental Justice Screening and Mapping Tool (EJScreen) for the community.

Community demographics can be found in the EJScreen, included in **Appendix C**. There are two specific sections identifying languages Other than English. "Languages Spoken at Home" and "Limited English-Speaking Breakdown".

Languages identified as other than English will be evaluated for translation services for written community and Stakeholder documents disseminated to the public. These translated items will be included with disseminated English documents and housed within the digital and physical document repositories. Additionally, live translation services may be provided during public meetings described in VIII.18.e(5)(d) Conducting an Open House or Informal Meeting based on research and responses to the community interviews and public responses received.

Nammo Defense Systems, Inc. (NDS) Community Update

This message is to help keep citizens informed about environmental activities happening in our community.

What will happen in my community?

¿Qué le ocurrirá a mi comunidad?

Actividades de perforación, la construcción y el muestreo del medio ambiente está tentativamente programado para comenzar el 10/16/23. Este trabajo ha sido coordinado con, y aprobado por, la ciudad de la Mesa.

Drilling activities, construction and environmental sampling is tentatively scheduled to begin on 10/16/23. This work plan has been coordinated with, and approved by, the City of Mesa.

Work activities may cause:

Actividades de trabajo pueden causar:

- Ruido de equipos pesados durante el horario comercial
- Aumento de tráfico y vehículos de trabajo en el área
- Restricciones de tráfico y estacionamiento
- Heavy equipment noise during normal business hours;
- Increased traffic and work vehicles in the area;
- Traffic or parking restrictions.

The map shows a residential street grid with a red dot indicating the 'PROPOSED NT-20 WELL LOCATION' near the intersection of N. 10th St. and N. 11th St.

Figure 5 - Translated Community Update Document

Consultation with the SRPMIC EPNR to determine if materials should also be translated into language appropriate for some members of SRPMIC's community was conducted on September 6, 2023, with follow up discussions with the SRPMIC

EPNR on both December 4, 2023, and January 23, 2024. Once the SRPMIC EPNR notifies NDS of an SRPMIC decision, arrangements will be made for appropriate translations.

6.7 Physical Document Repository (VIII.18.e(5)(g))

NDS established a physical document repository at Red Mountain Branch – Mesa Public Library, 635 N. Power Rd., Mesa, Arizona 85205. The repository houses the EPA’s Order on Consent as well as approved and finalized work plans and reports. The documents are housed in the Ready Reference Section, directly behind the reference librarians. The library reference call numbers are 363.4284 AD65N 2021 V.1. and 363.4284 AD65N 2021 V.2.

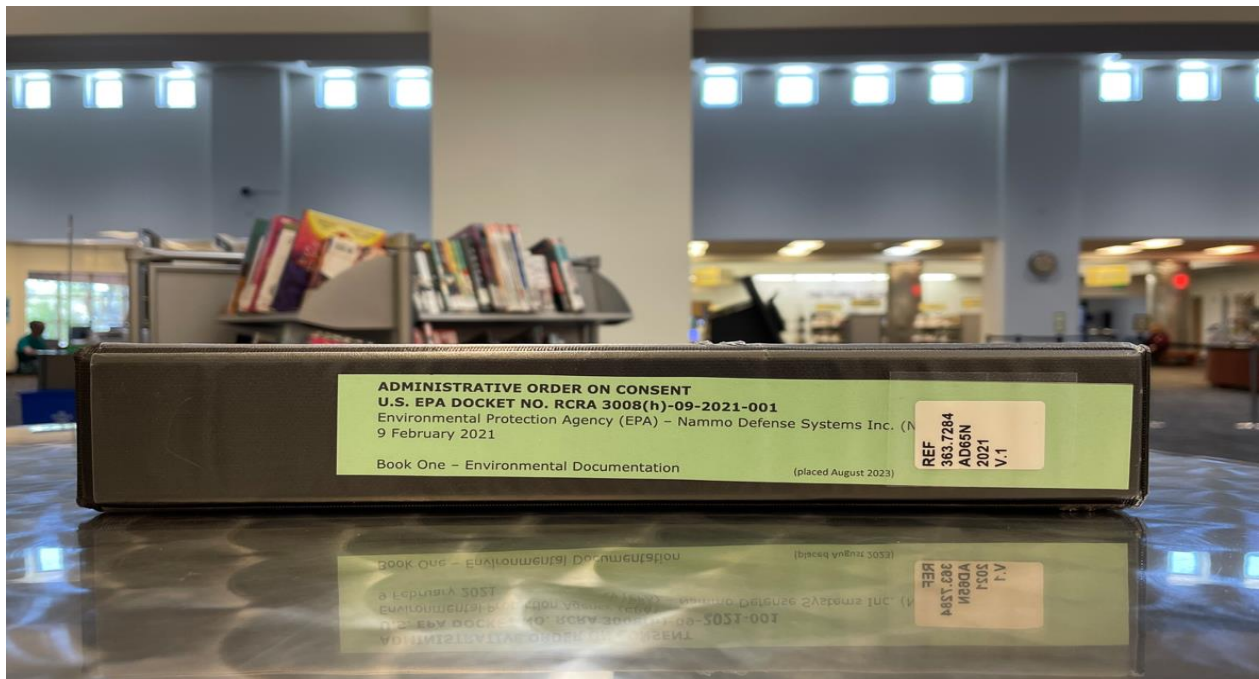


Figure 6 – (Photo) Book One of Physical Document Repository at Red Mountain Branch - Mesa Public Library

In addition to the Red Mountain Branch - Mesa Public Library repository, NDS has offered to establish a second physical repository at an SRPMIC building within SRPMIC lands upon request from SRPMIC. Discussions with the SRPMIC EPNR representative indicate that two potential locations may be viable: SRPMIC's office at the Two Waters Building and the SRPMIC Community Center in Scottsdale, Arizona.

6.8 Electronic Document Repository and Website (VIII.18.e(5)(h)) and (VIII.17.h)

NDS has created a publicly accessible website, www.nds-site-remediation.com which is a critical element in the Community Relations Plan. The website contains an online digital document repository. This website has been built to be accessible to everyone with a browser and access to the internet. The website includes descriptions of the Site history, COCs, impacted media, regulatory coordination and oversight, the EPA's Administrative Order on Consent, completed and ongoing remedial actions, and future Site work. Figures and Site content are updated as Site conditions change, and as documents are finalized.

The online electronic document repository contains downloadable copies of all approved and finalized work plans, reports, notices, and community involvement documents. Electronic Repository Site documents include facility Site maps that show both the WBO and TTU plume areas. The website also provides links directly to EPA information on perchlorate, trichloroethene (TCE), and 1,4-dioxane. The website also links directly to both the EPA's and ADEQ's websites describing their work involving the NDS Environmental Remediation projects.

NDS Environmental Remediation Community Outreach points of contact along with EPA and ADEQ regulatory points of contact were added to enable easy accessibility to answer questions and concerns from Stakeholders. "Keep Me Informed" is an option for interested parties and Stakeholders to sign up for the site's emailing/ mailing list.

The website and documents housed within the digital repository are compliant with Section 508 of the Rehabilitation Act Standards. Compliance is certified annually. Search Engine Optimization (SEO) was accomplished using strategic content and technical approaches based on industry best practices found in the Worldwide Web Consortium (W3C), the group responsible for web standards.

6.9 Necessary Elements of the 2016 RCRA Public Participation Manual (VIII.18.e(5)(i))

In the EPA's Order on Consent, item (VIII.18.e(5)(i)) listed the requirement to review the *2016 RCRA Public Participation Manual* for "necessary elements" to be utilized in constructing NDS's Community Relations Plan. Several portions of the document were applied in constructing the CRP, including Chapter 4 in its entirety. Chapter 4 is titled *Public Participation in RCRA Corrective Action Under Permits and RCRA § 3008(H) Orders*.

Also found in Chapter 4 was *RCRA's Public Participation Community Checklist's Community Engagement Assessment Worksheet for RCRA Permit Activities* and

guidance provided in the Manual for assessing community concerns. It's stated throughout the manual that when working with an Order on Consent, it's oftentimes best to follow guidance required of the permitting process referenced in Chapter 3, *Public Participation During the RCRA (Base) Permitting Process*.

Additional elements included methodology for conducting a baseline language assessment for all identified communities that are not proficient in the English language, referenced under "*Tools and Translations*".

Critical elements of Enhanced Community Engagement were referenced that include the NDS facility capacity to help coordinate community engagement, reviewing EPA's Enforcement and Compliance History Online (ECHO) database and EPA's "Environmental Justice (EJ) and Permitting" analysis.

Additional "Necessary Elements" utilized from the *2016 RCRA Public Participation Manual* included Mailing Lists, Communications Strategy Matrix, Translations, *2016 Public Participation Manual - Tools*, Fact Sheets, Public Hearings/Public Meetings, Public Comment Periods, Notices of Decision, Information Repositories, Community Interviews, Public Notices, Project Newsletters and Reports, Maps and Aerial Photography (EJSCREEN) and RCRA Community Engagement Checklist.

7.0 APPENDICES

APPENDIX A - LIST OF ACRONYMS

ADEQ	Arizona Department of Environmental Quality
AOC	Areas of Concern
ASLD	Arizona State Land Department
CIA	Community Involvement Area
COC	Contaminant of Concern
CRP	Community Relations Plan
DFR	Desert Firing Range
ECHO	Enforcement and Compliance History Online
EDDM	Every Door Direct Mail
EJ	Environmental Justice
EPA	United States Environmental Protection Agency
EPNR	Environmental Protection & Natural Resources Division
Ft.	Feet
FBR	Fluidized Bed Reactor
NDS	Nammo Defense Systems Inc.
NFA	No Further Action
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SEO	Search Engine Optimization
SRP	Salt River Project
SRPMIC	Salt River Pima-Maricopa Indian Community
TCE	Trichloroethene
TDS	Talley Defense Systems Inc.
TTU	Thermal Treatment Unit
USPS	United States Postal Service
VOCs	Volatile Organic Compounds
VRP	Voluntary Remediation Program
W3C	Worldwide Web Consortium

APPENDIX B - STAKEHOLDER LISTS

Directly Impacted Parties – Owners (Lessees) of Impacted Wells and Land	
Property Owner (Lessee)	Address
Salt River Pima-Maricopa Indian Community (SRPMIC)	Two Waters Building Building B - 3 rd Floor 10079 East Osborn Road Scottsdale, Arizona 85256
Washington National Primate Research Center (WANPRC) (Lessee of SRPMIC)	<i>Known*</i>
City of Mesa	Mesa City Hall 20 E Main St. Mesa, AZ 85201
Salt River Project (SRP)	SRP Headquarters 1500 N. Mill Ave. Tempe, AZ 85281
LafargeHolcim	<i>Known*</i>
Habeeb Ranch	<i>Known*</i>
Citrus Heights Ranch	<i>Known*</i>
Painted Mountain Golf Course	<i>Known*</i>
Longbow Golf Course	<i>Known*</i>
Alta Mesa Golf Course	<i>Known*</i>
Apache Wells Golf Course	<i>Known*</i>

*Addresses for directly impacted parties has been identified and added to the stakeholder list but is omitted from this document to protect the privacy of individual stakeholders.

Geographically Adjacent Parties

Geographically Adjacent Parties are NDS employees working at the Mesa, Arizona Site, businesses, residents, and landowners within a Community Involvement Area (CIA) currently defined by the EPA as bound by University Drive to the south, SRPMIC and BLM Land to the north, Power Road to the east and Val Vista Road to the west, per the EPA's request.

Salt River Pima - Maricopa Indian Community (SRPMIC)	
Contact Name, Title	Address
Carol Hibbard, Senior Environmental Engineer Community Development Department Salt River Pima – Maricopa Indian Community Environmental Protection & Natural Resources (EPNR)	Two Waters Building Building B - 3 rd Floor 10079 East Osborn Road Scottsdale, Arizona 85256
Christopher Horan, Assistant Director, Community Development Salt River Pima – Maricopa Indian Community Community Development Department	Two Waters Building Building B - 3 rd Floor 10079 East Osborn Road Scottsdale, Arizona 85256

City of Mesa, Arizona	
Contact Name, Title	Address, Phone Number, Point of Contact (POC)
The Honorable John Giles Mayor of the City of Mesa	P.O. Box 1466 Mesa, Arizona 85211 Phone: 480.644.2388 POC: Chief of Staff Casey Blake Phone: 480.644.3219
Councilmember Mark Freeman District 1 (Northwest Mesa)	P.O. Box 1466 Mesa, Arizona 85211 Phone: 480.644.2190 POC: Council District Coordinator Katie Brown Phone: 480.644.2190
Councilmember Julie Spilsbury District 2 (Central and South Central Mesa)	P.O. Box 1466 Mesa, Arizona 85211 Phone: 480.644.3772 POC: Council District Coordinator Melissa Hollenbeck Phone: 480.644.5295

City of Mesa, Arizona (Continued)	
Contact Name, Title	Address, Phone Number, Point of Contact (POC)
Vice Mayor Francisco Heredia District 3 (Southwest Mesa)	P.O. Box 1466 Mesa, Arizona 85211 Phone: 480.644.3003 POC: District Coordinator Lucy Hambright Phone: 480.644.6275
Councilmember Jenn Duff District 4 (Downtown Mesa and area south of downtown)	P.O. Box 1466 Mesa, Arizona 85211 Phone: 480.644.3004 POC: Council District Coordinator Priscilla Gutierrez Phone: 480.644.4745
Councilmember Alicia Goforth District 5 (Northeast Mesa)	P.O. Box 1466 Mesa, Arizona 85211 Phone: 480.644.3771 POC: Council District Coordinator Antonia Mejia Phone: 480.644.6799
Councilmember Scott Somers District 6 (Southeast Mesa)	P.O. Box 1466 Mesa, Arizona 85211 Phone: 480.644.4003 POC: Council District Coordinator Alicia Martinez Phone: 480.644.5296
Steve DiDomenico Engineering Designer City of Mesa, Engineering	P.O. Box 1466 Mesa, Arizona 85211 Phone: 480.644.2882
Curt Albright Public Relations Supervisor City of Mesa, Engineering	P.O. Box 1466 Mesa, Arizona 85211 Phone: 480.644.3800
Michele Arrollado Marketing Communications Specialist II City of Mesa, Engineering Public Relations	P.O. Box 1466 Mesa, Arizona 85211 Phone: 480.644.3800

Maricopa County	
Contact Name, Title	Address, Phone Number
Ryan Dalrymple Senior Associate Engineer, EIT Maricopa County Air Quality Department	301 W. Jefferson St., Suite 410 Phoenix, Arizona 85003 Phone: 602.372.0997

State of Arizona Government	
Contact Name, Title	Address, Phone Number
The Honorable Katie Hobbs Governor of the State of Arizona	1700 West Washington Street Phoenix, Arizona 85007
The Honorable David C. Farnsworth State Senator Arizona State Legislature Senate Member District 10	Arizona State Capitol Complex 1700 West Washington Street Phoenix, Arizona 85007 Phone: 602.926.3387
The Honorable Justin Heap State Representative Arizona State Legislature House Member District 10	Arizona State Capitol Complex 1700 West Washington Street Phoenix, Arizona 85007 Phone: 602.926.4181

Arizona Department of Environmental Quality (ADEQ)	
Contact Name, Title	Address, Phone Number
Kyle Johnson, P.E. – Senior Engineer	Arizona Department of Environmental Quality 1110 West Washington Street Phoenix, Arizona 85007
Robin A. Thomas, P.E – Senior Engineer, Solid/Hazardous Waste	Arizona Department of Environmental Quality 1110 West Washington Street Phoenix, Arizona 85007
Chuck Allen, Senior Environmental Engineer, Hazardous Waste Group	Arizona Department of Environmental Quality 1110 West Washington Street Phoenix, Arizona 85007
Nichole Osuch, VRP Manager	Arizona Department of Environmental Quality 1110 West Washington Street Phoenix, Arizona 85007

Arizona Department of Water Resources (ADWR)	
Contact Name, Title	Address, Phone Number
Arizona Department of Water Resources	1110 West Washington Street, Suite 310 Phoenix, Arizona 85007

U.S. Department of the Interior Bureau of Land Management (BLM)	
Contact Name, Title	Address, Phone Number
U.S. Department of the Interior Bureau of Land Management	National Office 1849 C Street NW Washington, D.C. 20240
BLM Arizona	Arizona State Office One North Central Ave., Suite 800 Phoenix, Arizona, 85004-4427

U.S. Senators from Arizona	
Contact Name, Title	Address, Phone Number
The Honorable Kyrsten Sinema U.S. Senator for Arizona	317 Hart Senate Office Building Washington D.C. 20510 Phoenix Office: 3333 East Camelback Road, Suite 200 Phoenix, Arizona 85018
The Honorable Mark Kelly U.S. Senator for Arizona	Hart Senate Office Building, Suite 516 Washington, D.C. 20510 Phoenix Office: 2201 East Camelback Road, Suite 115 Phoenix, Arizona 85016
The Honorable Greg Stanton U.S. Representative, Arizona's 4th District	207 Cannon House Office Building Washington, D.C. 20515 Mesa Office: 1220 South Alma School Road, Suite 209 Mesa, Arizona 85210

U.S. Representatives from Arizona	
Contact Name, Title	Address, Phone Number
The Honorable Greg Stanton U.S. Representative, Arizona's 4th District	207 Cannon House Office Building Washington, D.C. 20515 Mesa Office: 1220 South Alma School Road, Suite 209 Mesa, Arizona 85210

U.S. Environmental Protection Agency (EPA)	
Contact Name, Title	Address, Phone Number
Jocelyn Clark, P.E. Environmental Engineer RCRA Branch/Land, Chemicals, and Redevelopment Division	U.S. Environmental Protection Agency – Region 9 75 Hawthorne Street, LND-4-2 San Francisco, California 94105
W. Patrick Frier, Physical Scientist Land Chemicals and Redevelopment Division	U.S. Environmental Protection Agency – Region 9 75 Hawthorne St., LND-4-2, San Francisco, California 94105

APPENDIX C - DEMOGRAPHICS - ENVIRONMENTAL JUSTICE SCREEN (EJ SCREEN) - MESA

3/6/24, 2:23 PM

EJScreen Community Report

PRELIMINARY RESULTS

EPA

EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Mesa, AZ

the User Specified Area

Population: 79,152

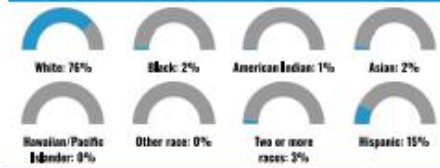
Area in square miles: 26.84



COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	90%
Spanish	7%
Other Indo-European	1%
Total Non-English	10%

https://ejscreen.epa.gov/mapper/ejscreen_SOE.aspx

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PRELIMINARY RESULTS

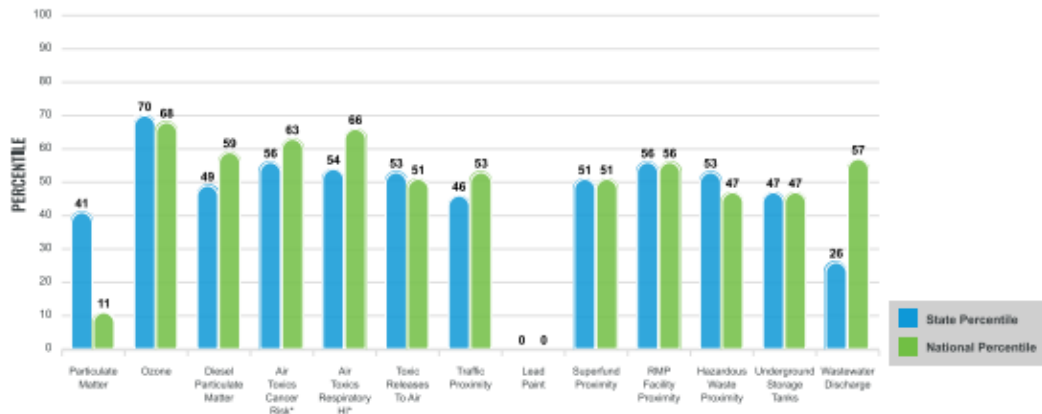
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

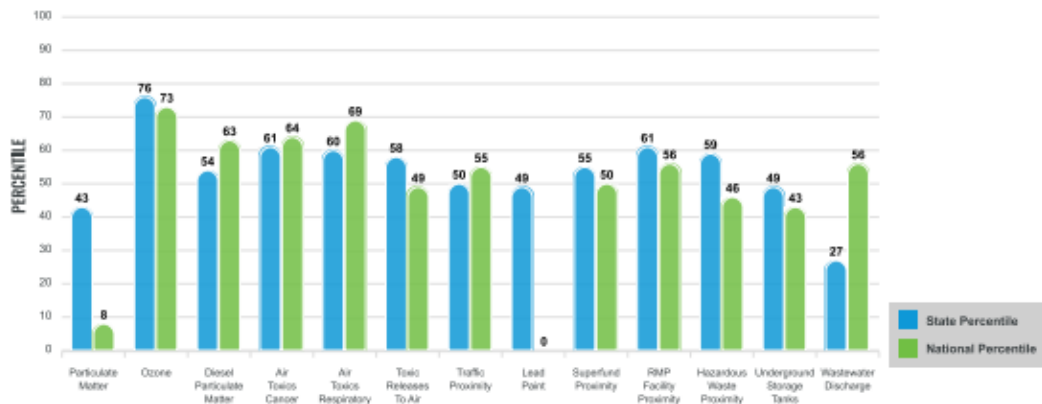
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for the User Specified Area

PRELIMINARY RESULTS

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	5.95	5.87	44	8.08	8
Ozone (ppb)	71.3	66.1	97	61.6	95
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.327	0.278	55	0.261	73
Air Toxics Cancer Risk* (lifetime risk per million)	30	25	43	25	52
Air Toxics Respiratory HI*	0.39	0.31	30	0.31	31
Toxic Releases to Air	790	2,800	65	4,600	54
Traffic Proximity (daily traffic count/distance to road)	140	190	56	210	66
Lead Paint (% Pre-1960 Housing)	0.012	0.089	51	0.3	16
Superfund Proximity (site count/km distance)	0.068	0.077	63	0.13	54
RMP Facility Proximity (facility count/km distance)	0.39	0.38	78	0.43	72
Hazardous Waste Proximity (facility count/km distance)	0.71	0.71	74	1.9	55
Underground Storage Tanks (count/km ²)	1.1	1.7	58	3.9	49
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.012	5.8	34	22	69
SOCIOECONOMIC INDICATORS					
Demographic Index	22%	38%	29	35%	37
Supplemental Demographic Index	10%	14%	34	14%	33
People of Color	24%	44%	29	39%	43
Low Income	21%	32%	37	31%	38
Unemployment Rate	5%	6%	55	6%	56
Limited English Speaking Households	1%	4%	56	5%	61
Less Than High School Education	5%	12%	39	12%	36
Under Age 5	6%	5%	58	6%	57
Over Age 64	21%	20%	68	17%	70
Low Life Expectancy	16%	19%	14	20%	18

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/air-toxics-data-update>

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	4
Water Dischargers	42
Air Pollution	3
Brownfields	1
Toxic Release Inventory	21

Other community features within defined area:

Schools	21
Hospitals	0
Places of Worship	24

Other environmental data:

Air Non-attainment	Yes
Impaired Waters	No

Selected location contains American Indian Reservation Lands*	No
Selected location contains a "Justice40 (CEIST)" disadvantaged community	Yes
Selected location contains an EPA RIA disadvantaged community	Yes

Report for the User Specified Area

PRELIMINARY RESULTS

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	16%	19%	14	20%	18
Heart Disease	6.2	6	62	6.1	54
Asthma	10	10.6	34	10	55
Cancer	7.2	6.1	74	6.1	74
Persons with Disabilities	12.8%	13.9%	52	13.4%	52

CLIMATE INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	3%	6%	60	12%	31
Wildfire Risk	12%	48%	45	14%	82

CRITICAL SERVICE GAPS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	7%	13%	45	14%	35
Lack of Health Insurance	7%	10%	42	9%	54
Housing Burden	Yes	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	Yes	N/A	N/A	N/A	N/A

Report for the User Specified Area

www.epa.gov/ejscreen

https://ejscreen.epa.gov/mapper/ejscreen_SOE.aspx

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APPENDIX D - DEMOGRAPHICS - ENVIRONMENTAL JUSTICE SCREEN (EJ SCREEN) - MARICOPA

PRELIMINARY RESULTS 

EJScreen Community Report

This report provides environmental and socioeconomic information for user-defined areas, and combines that data into environmental justice and supplemental indexes.

Maricopa County, AZ

Blockgroup: 040139413002
Population: 825
Area in square miles: 55.13



COMMUNITY INFORMATION



BREAKDOWN BY RACE



BREAKDOWN BY AGE



LANGUAGES SPOKEN AT HOME

LANGUAGE	PERCENT
English	92%
Spanish	3%
Other and Unspecified	5%
Total Non-English	8%

LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.

PRELIMINARY RESULTS

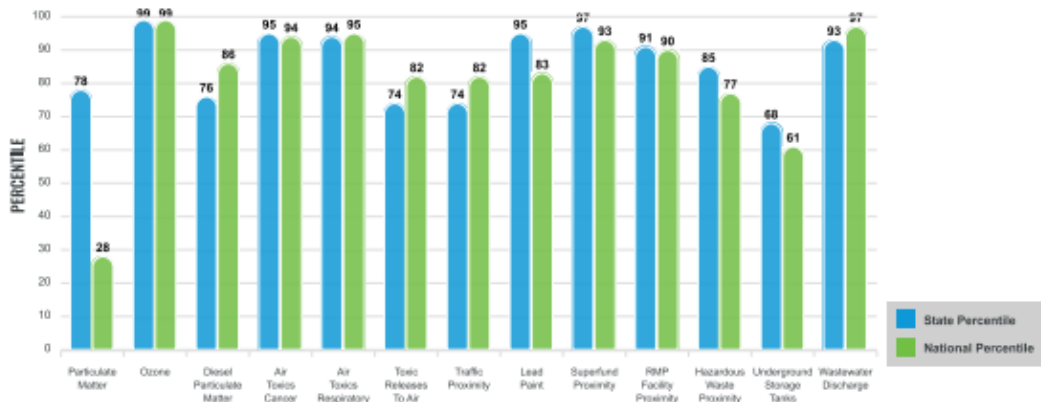
Environmental Justice & Supplemental Indexes

The environmental justice and supplemental indexes are a combination of environmental and socioeconomic information. There are thirteen EJ indexes and supplemental indexes in EJScreen reflecting the 13 environmental indicators. The indexes for a selected area are compared to those for all other locations in the state or nation. For more information and calculation details on the EJ and supplemental indexes, please visit the [EJScreen website](#).

EJ INDEXES

The EJ indexes help users screen for potential EJ concerns. To do this, the EJ index combines data on low income and people of color populations with a single environmental indicator.

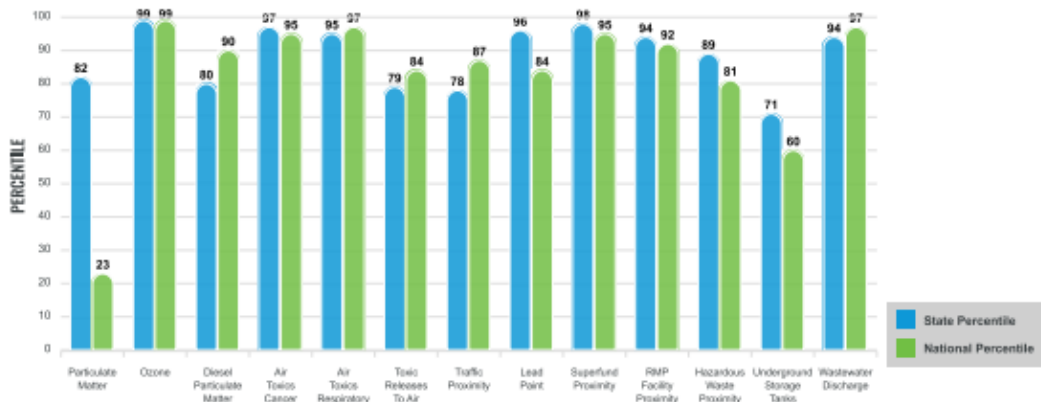
EJ INDEXES FOR THE SELECTED LOCATION



SUPPLEMENTAL INDEXES

The supplemental indexes offer a different perspective on community-level vulnerability. They combine data on percent low-income, percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy with a single environmental indicator.

SUPPLEMENTAL INDEXES FOR THE SELECTED LOCATION



These percentiles provide perspective on how the selected block group or buffer area compares to the entire state or nation.

Report for Blockgroup: 040138413002

PRELIMINARY RESULTS

EJScreen Environmental and Socioeconomic Indicators Data

SELECTED VARIABLES	VALUE	STATE AVERAGE	PERCENTILE IN STATE	USA AVERAGE	PERCENTILE IN USA
POLLUTION AND SOURCES					
Particulate Matter ($\mu\text{g}/\text{m}^3$)	5.82	5.87	41	8.08	7
Ozone (ppb)	71.1	66.1	96	61.6	95
Diesel Particulate Matter ($\mu\text{g}/\text{m}^3$)	0.24	0.278	39	0.261	55
Air Toxics Cancer Risk* (lifetime risk per million)	30	25	43	25	52
Air Toxics Respiratory HI*	0.4	0.31	54	0.31	70
Toxic Releases to Air	370	2,800	38	4,600	41
Traffic Proximity (daily traffic count/distance to road)	75	190	37	210	49
Lead Paint (% Pre-1960 Housing)	0.17	0.089	82	0.3	44
Superfund Proximity (site count/km distance)	0.1	0.077	82	0.13	67
RMP Facility Proximity (facility count/km distance)	0.24	0.38	69	0.43	62
Hazardous Waste Proximity (facility count/km distance)	0.26	0.71	55	1.9	40
Underground Storage Tanks (count/km ²)	0.017	1.7	31	3.9	22
Wastewater Discharge (toxicity-weighted concentration/m distance)	0.13	5.8	59	22	83
SOCIOECONOMIC INDICATORS					
Demographic Index	78%	38%	94	35%	94
Supplemental Demographic Index	32%	14%	96	14%	96
People of Color	100%	44%	99	39%	98
Low Income	57%	32%	84	31%	86
Unemployment Rate	42%	6%	99	6%	99
Limited English Speaking Households	0%	4%	0	5%	0
Less Than High School Education	29%	12%	87	12%	90
Under Age 5	2%	5%	26	6%	22
Over Age 64	14%	20%	49	17%	43
Low Life Expectancy	33%	19%	99	20%	99

*Diesel particulate matter, air toxics cancer risk, and air toxics respiratory hazard index are from the EPA's Air Toxics Data Update, which is the Agency's ongoing, comprehensive evaluation of air toxics in the United States. This effort aims to prioritize air toxics emission sources, and locations of interest for further study. It is important to remember that the air toxics data presented here provide broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. Cancer risks and hazard indices from the Air Toxics Data Update are reported to one significant figure and any additional significant figures here are due to rounding. More information on the Air Toxics Data Update can be found at: <https://www.epa.gov/airtoxic/airtoxics-data-update>

Sites reporting to EPA within defined area:

Superfund	0
Hazardous Waste, Treatment, Storage, and Disposal Facilities	0
Water Dischargers	14
Air Pollution	2
Brownfields	15
Toxic Release Inventory	0

Other community features within defined area:

Schools	0
Hospitals	0
Places of Worship	2

Other environmental data:

Air Non-attainment	Yes
Impaired Waters	Yes

Selected location contains American Indian Reservation Lands*	Yes
Selected location contains a "Justice40 (CEJST)" disadvantaged community	Yes
Selected location contains an EPA IRA disadvantaged community	Yes

Report for Blockgroup: 040139413002

PRELIMINARY RESULTS

EJScreen Environmental and Socioeconomic Indicators Data

HEALTH INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Low Life Expectancy	33%	19%	99	20%	99
Heart Disease	10,9	6	94	6,1	98
Asthma	14,4	10,6	97	10	98
Cancer	7,2	6,1	74	6,1	74
Persons with Disabilities	23,9%	13,9%	91	13,4%	93

CLIMATE INDICATORS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Flood Risk	0%	6%	0	12%	0
Wildfire Risk	67%	48%	53	14%	87

CRITICAL SERVICE GAPS					
INDICATOR	VALUE	STATE AVERAGE	STATE PERCENTILE	US AVERAGE	US PERCENTILE
Broadband Internet	29%	13%	88	14%	87
Lack of Health Insurance	19%	10%	86	9%	91
Housing Burden	No	N/A	N/A	N/A	N/A
Transportation Access	Yes	N/A	N/A	N/A	N/A
Food Desert	No	N/A	N/A	N/A	N/A

Report for Blockgroup: 040139413002

www.epa.gov/ejscreen

https://ejscreen.epa.gov/mapper/ejscreen_SOE.aspx

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APPENDIX E - FACT SHEET

FACT SHEET

Environmental Cleanup Project at Nammo Defense Systems Inc.

July 2021

Overview


This Fact Sheet is being published by Nammo Defense Systems (NDS) as required by an Administrative Order on Consent (Order). The Order, dated February 9, 2021, is an enforceable agreement between the United States Environmental Protection Agency (EPA) and NDS that provides a framework for environmental investigation and cleanup of the land and groundwater at and around the NDS facility in northeast Mesa, Arizona. This initial Fact Sheet summarizes information about the ongoing investigation and cleanup activities at the NDS facility and provides references to additional information and project contacts for interested stakeholders. Although the Order is between EPA and NDS, EPA is working closely with the Arizona Department of Environmental Quality (ADEQ) and the Salt River Pima Maricopa Indian Community's (SRPMIC) Environmental Protection and Natural Resources Division to oversee the environmental work at this facility.

FAST FACTS

- The site is in northeast Mesa, AZ. It is located north of Arizona State Route 202 (Red Mountain Freeway) and east of the Salt River Canal. The NDS facility is adjacent to, but not on, SRPMIC land.
- NDS is an aerospace and defense company that manufactures specialty ammunition and rocket motors. NDS acquired Talley Defense Systems (the site's prior owner/operator) in 2007. NDS has managed environmental cleanup efforts at the site since acquisition of Talley Defense Systems.
- Existing environmental data indicate that contaminants are present in groundwater and soil.
- The contamination is likely due to manufacturing operations that occurred between the 1960s and the early 2000s.
- Environmental contamination at the site is located in two distinct areas, both of which are part of the NDS facility: 1.) the former Thermal Treatment Unit (TTU) and 2.) the former Water Bore-Out (WBO) facility.
- Although groundwater contamination exists in this area, the affected groundwater is not a source of public drinking water.
- Environmental assessment and cleanup efforts first began in the 1990s under Talley Defense Systems.
- Soil and groundwater testing provide data to support ongoing environmental management and cleanup. NDS has continued this environmental cleanup effort and has installed groundwater monitoring wells.

Corporate History & Background

Talley Industries, Inc. operated in Mesa (on the site now occupied by Nammo Defense Systems Inc.) from 1960 until the mid-1980s. Talley specialized in the design, development and manufacture of ammunition and energetic material solutions for defense and commercial applications. The site in Mesa has a rich history in the aerospace and defense industry developing aircrew escape systems, automobile airbag components, shoulder-fired weapon systems, and other propellant-loaded devices. In 1984, they became Talley Defense Systems, Inc. and continued operations until 2007. The NDS Group currently owns the original Talley company and now operates the Mesa facility.



Environmental History

The environmental regulatory history of the facility includes two contaminant release areas: the former Thermal Treatment Unit (TTU) and the former Water Bore-Out (WBO). Substantial groundwater and soil testing has been conducted to characterize the nature of contamination as part of an ongoing environmental investigation. Additional work is required to fully characterize the site and determine next steps.

Former Thermal Treatment Unit (TTU)

The former Talley Industries Inc. TTU is located approximately 1.25 miles north-northeast of the intersection of East Thomas Road and North Higley Road, Mesa AZ. Talley commenced operations at the TTU in the 1960s. At that time hazardous waste propellants were treated by means of open burning. Upon arrival at the TTU, hazardous waste was unloaded and temporarily stored in designated pits and/or burn apparatuses. Once in place, the hazardous waste was burnt by remote ignition.

Testing has identified:

- Contaminants of concern in soil include lead, perchlorate, and 2,3,7,8-Tetrachlorodibenzodioxin, which currently exceed Arizona Soil Remediation Levels (per Ariz. Admin. Code § 18-7-210). Perchlorate exceeds the Soil Remediation Level outside the boundary of the TTU, on the company's site, and off-site.
- Contaminants of concern in groundwater (perchlorate, 1,4-dioxane, and volatile organic compounds including trichloroethene, tetrachloroethene, benzene, 1,1-dichloroethene, dichloromethane and, 1,1,2-trichloroethane) have resulted in a groundwater contamination plume that currently measures approximately 0.25-miles long, extending off-site to the west, down gradient of the former TTU, and within Salt River Pima-Maricopa Indian Community property.
- Contaminants of concern in soil vapor (volatile organic compounds) appear to be limited to the TTU source area, and its vicinity.

Interim cleanup measures, including source area soil removal and installation of a groundwater pump and treat system, have been implemented and an in-situ biological injection pilot study is currently being conducted. Currently available information helps to define the extent of the impacts. Future regulatory requirements for the TTU include: 1.) completion of a Conceptual Site Model; 2.) additional assessment to refine the current understanding of the extent of releases in soil, soil-vapor and groundwater; and 3.) remediation of contaminants in all media found above regulatory levels. Environmental cleanup efforts at the TTU are subject to the Order. NDS is conducting environmental work at the TTU under the regulatory oversight of EPA.

Former Water Bore-Out (WBO)

The Talley Industries Inc. WBO site occupies approximately 100 acres of land within the current NDS facility and contains two main buildings and multiple other smaller buildings where research, design, testing, assembly, and packaging is currently conducted by NDS. When in operation, the WBO facility used a high-pressure water jet to remove waste material from manufactured components.

During the years the site was owned and operated by Talley Industries Inc., contaminants – now identified as contaminants of concern, were released into the environment. Presently, NDS (as the current business owner) is conducting an investigation under the regulatory oversight of the ADEQ and working within the ADEQ Voluntary Remediation Program (VRP) to clean up the WBO site.

The Site Today and Future Plans

NDS's current facility houses four separate plants and covers approximately 534 acres of land. It is located about 20 miles east-northeast of downtown Phoenix in the northern part of the City of Mesa in Maricopa County, Arizona.

While continuing as a valued defense contractor and employer in the East Valley, NDS plans to continue with the ongoing environmental investigation and cleanup. Substantial characterization and monitoring have been conducted. Work continues to completely characterize the nature of the contamination. As studies are completed, NDS will consolidate all the existing site characterization data into a report so that the information may then be used to proceed with clean-up.

NDS has developed this Fact Sheet, and is working on a community involvement plan outline and a scope of work for the environmental work related to the Order. At the company's manufacturing facilities, work continues to design, develop, produce, and deliver on current and anticipated contracts with the United States Department of Defense.




"We are committed to protecting the environment."

How May the Public be Involved?

NDS will keep the public informed through fact sheets, public meetings, and mailings. Please sign-up for the mailing list to be notified of site progress and upcoming meetings. Please let us know if there are others who should be provided notices by using the "Contact for Information" link provided on the www.ttuproject.info website. Alternatively, please call 480.898.2200 and provide contact information along with a request to receive information about this project.

Information Repository

All publicly available information and documents related to this Consent Order are available through the www.ttuproject.info website. Additionally, we are in the process of establishing a physical location where materials will be on file and available to the public. Information about that resource will be provided on the website soon.



Additional Informational Resources

- **United States Environmental Protection Agency, Region 9**

Project Coordinator: Patrick Frier

Email: frier.william@epa.gov

Phone: (415)-972-3984

- **Arizona Department of Environmental Quality**

Project Coordinator: Kyle Johnson

Email: johnson.kyle@azdeq.gov

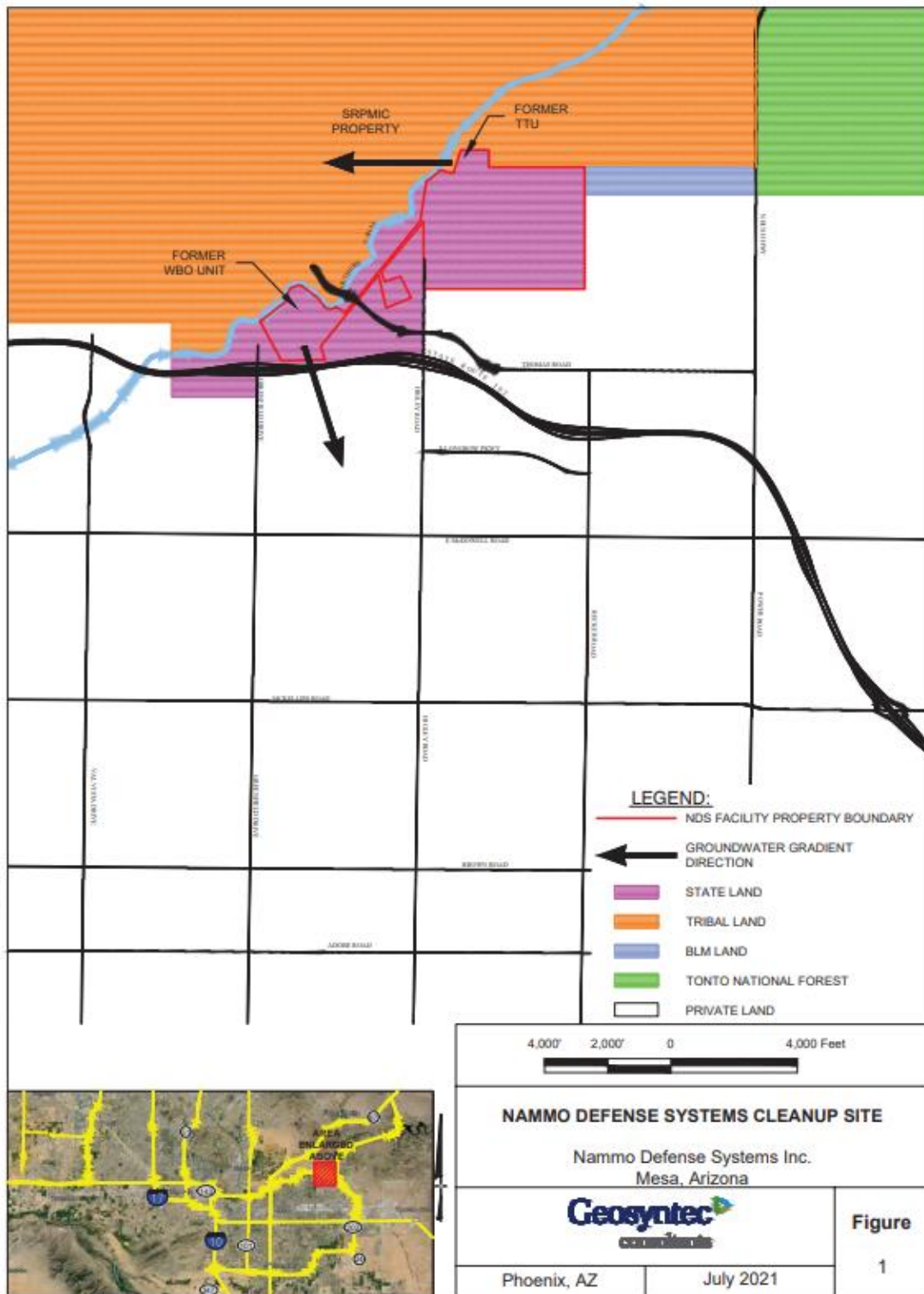
Phone: (602)-771-8704

- **Nammo Defense Systems Inc. in Mesa, Arizona**

NDS Public Affairs: C.J. Thompson

Email: cthompson@nammo.us

Phone: (480)-898-2565



GLOSSARY OF ENVIRONMENTAL CONTAMINANTS

Environmental Cleanup Project at Nammo Defense Systems Inc.

July 2021

Benzene

Benzene is an organic chemical compound that is a colorless or light yellow liquid at room temperature. It has a sweet odor and is highly flammable. Benzene evaporates into the air very quickly and its vapor is heavier than air and may sink into low-lying areas. Benzene dissolves only slightly in water and will float on top of water.

1-2 Dichloroethane (1,2-DCA)

A colorless, oily solvent that is primarily used to make other chemicals, including plastic and vinyl products, and as an industrial degreaser. It is also a degradation product of other chlorinated solvents.

1-1 Dichloroethylene (1,1-DCE)

A colorless solvent commonly used to make certain plastics, packaging materials, and flame-retardant coatings. It is also a degradation product of other chlorinated solvents.

Dichloromethane

Dichloromethane, commonly called methylene chloride, is a solvent that is widely used in chemical research and manufacturing. It is a highly volatile liquid, but it is neither flammable nor explosive in air.

1,4-Dioxane

1,4-Dioxane is a synthetic industrial chemical that is completely miscible (fully dissolvable in each other at any concentration) in water. It is a flammable liquid and a fire hazard and is potentially explosive if exposed to light or air. 1,4-Dioxane may be found at many federal facilities because of its widespread use as a stabilizer in certain chlorinated solvents, paint strippers, greases and waxes.

Lead

Lead is a naturally occurring element found in small amounts in the earth's crust. While it has some beneficial uses, it can be toxic to humans and animals, causing health effects.

Nitrate

A colorless, odorless, and tasteless compound that is present in groundwater. Nitrates form when microorganisms break down fertilizers, decaying plants, manures, or other organic residues. Usually plants take up these nitrates, but sometimes rain water can leach them into groundwater. Although nitrate occurs naturally in some groundwater, higher levels are thought to result from human activities. Common sources include fertilizers and manure, animal feedlots, municipal waste and sludge, and septic systems.

Perchlorate

Perchlorate is a negatively charged molecule made of one chlorine atom and four oxygen atoms. Perchlorate can occur naturally or be man-made and also forms naturally in the atmosphere. It occurs naturally in arid states in the Southwest United States. Manufactured perchlorate is used as an industrial chemical and can be found in rocket propellant, explosives, fireworks, and road flares.

Tetrachloroethene (PCE)

A clear, colorless, nonflammable solvent that readily evaporates at room temperature. PCE is widely used for dry cleaning of fabrics and degreasing/drying of metals.

2,3,7,8-Tetrachlorodibenzodioxin (2,3,7,8-TCDD)

Pure 2,3,7,8-TCDD is a colorless solid with no distinguishable odor at room temperature. It is usually formed as an unwanted product in burning processes of organic materials or as a side product in organic synthesis.

Trichloroethene (TCE)

TCE is a nonflammable, colorless solvent that readily evaporates at room temperature. TCE is used mainly for degreasing/drying of metals and for dry cleaning of fabrics.

1,1,2-Trichloroethane

A colorless, sweet-smelling liquid. It does not burn easily, can be dissolved in water and evaporates easily. It is used as a solvent (a chemical that dissolves other substances) and as an intermediate in the production of the chemical, 1,1-dichloroethane. 1,1,2-Trichloroethane is sometimes present as an impurity in other chemicals, and it may be formed when another chemical breaks down in the environment under conditions where there is no air.

Volatile organic compounds (VOCs)

A large group of carbon-containing chemicals that readily evaporate at room temperature. Examples of VOCs are isopropyl alcohol (rubbing alcohol), acetone (found in some nail polish removers), and the solvents PCE and TCE (used in dry cleaning and metal degreasing).

APPENDIX F - REFERENCES

Arizona State Legislature, *Arizona Revised Statutes Title 49- The Environment, Chapter 1, Article 5 Voluntary Remediation Program (§ 49-176)*
(<https://www.azleg.gov/arsDetail/?title=49>)

Administrative Order on Consent, *In re: Nammo Defense Systems, Mesa Arizona in a Proceeding under Section 3008(h) of the Resource Conservation and Recovery Act, 42 U.S.C. 6928(h)*, USEPA Docket No. RCRA 30008(h)-09-2021-001

USEPA, 2016, *RCRA Public Participation Manual*
(<https://www.epa.gov/hwpermitting/resources-public-participation-hazardous-waste-permitting-and-corrective-action>)

USEPA, *RCRA Public Participation Toolkit* (<https://www.epa.gov/hwpermitting/rcra-public-participation-tools-and-resources>)

USEPA, *EJScreen: Environmental Justice Screening and Mapping Tool*
(<https://www.epa.gov/ejscreen>)

Geosyntec Consultants, June 2023, *Conceptual Site Model*